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Towards Resilient Communities with Sustainable Development: Use of a Participative Dynamic Approach for Project Monitoring and Learning within the new Paradigm of the Sustainable Development Goals 2030

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ABSTRACT

Project planning, monitoring and evaluation of development have been carried out in past decades based mostly on the Log-frame, a well-known tool built up half a century ago to synthesize primarily the main elements of project planning and evaluation. Nevertheless, early this century experts of the field offered positive observations to improve the linear and top-down approach of the Log-frame. They underlined the complex, non-linear and dynamic contexts, where most communities live in developing countries and the need for innovation, participation and adaptation to improve with bottom-up approaches the wellbeing of those communities.

In particular the authors recommended new Programs of Theory or Theories of Changes and System Thinking as complementary areas.

New ways of planning, monitoring and learning were analyzed to support technical teams of local governments to respond to the challenges of the new paradigm 2030 and to be accountable with the participation and empowerment of their communities to achieve efficient solutions.

The dissertation proposes the use of a participative, numeric and dynamic approach for Project Planning Monitoring, Systematizing and Learning based on the theory of change Plan for Quality-Accountability-Transparency and the Outcome Mapping Log-frame-Tree responding to the requests of a Fusion Model.

Local teams will respond to the demands of their communities with appropriate project planning and implementation. Field teams and leaders will analyze the advances of indicators to learn with stakeholders thru continuous feedback and to report in an opportune frequency for management and stakeholders to make appropriate decisions together.

The method implemented five static and three dynamic databases in Excel in three stages of planning, field monitoring and executive monitoring and reporting. It helped the analysis and feedback including the Systematization Curves.

The process has been applied in three projects and the results were discussed and new challenges were proposed for strengthening local technical teams to insert disaster risk reduction into the regular planning of local governments and to keep learning in a rather constructivist capacity building program supported by the coordination with regional programs and national policies.

ZUSAMMENFASSUNG

In den vergangenen Jahrzehnten wurden Planung, Monitoring und Evaluation von Entwicklungsprojekten meistens mit dem bekannten Log-Rahmen Verfahren durchgeführt. Dieses Verfahren war vor fünfzig Jahren entwickelt worden, um in erster Linie die wesentlichen Elemente von Projektplanung und -evaluation zusammenzufügen.
Zu Beginn des 21. Jahrhunderts haben Experten weitreichende Verbesserungen für die linearen Prozesse und den top-down Ansatz des bisherigen Verfahrens vorgeschlagen. . Sie haben vor allem die Prozesse in komplexen, nicht-linearen und dynamisch-emergenten Regionen hervorgehoben. Gerade in Entwicklungsländern kann in den betroffenen Orten und Regionen die Not nur mit Innovation, Beteiligung und Anpassung gemindert werden. d.h. mit Hilfe von bottom-up Ansätzen, die das Wohlbefinden der Gemeinden verbessern. Vor diesem Hintergrund entstanden neue Ansätze bzw. Theorien, in denen Veränderungen und Systemdenken als zwei ergänzende Bereiche im Vordergrund stehen.
Neue Wege wurden für Plannung, Monitoring und Lernen entwickelt, um die technische Teams lokaler Regierungen mit den Herausforderungen des neuen Paradigmas 2030 zu fördern und verantwortungsvoll effiziente Lösungen in die Entscheidungsprozesse zusammen mit den Gemeinden zu erzielen.
Diese Dissertation schlägt die Einführung einer partizipativen, numerischen und dynamischen Methode zum Plannen, Monitoring, und Lernen vor. Das Verfahren basiert auf der Veränderungstheorie der "Plan for Quality-Accountability-Transparency" sowie auf den Ergebnissen des "Outcome Mapping Log-frame-Tree" entsprechend den Anforderungen eines Fusions Modells.
Lokale Teams werden auf die Anforderungen ihres Ortes mit einer geeigneten Projektplanung und -durchführung antworten. Entscheidungsträger, die lokalen Behörden und Management werden in der Lage sein, Fortschritte der Indikatoren zu analysieren, mit Interessengruppen aus der kontinuierliche Rückkoppelung zu lernen und angemessenen Entscheidungen gemeinsam zu treffen.
Die Methode führt fünf statische und drei dynamische Databanken (excel) in drei Stufen zusammen: Planung, Monitoring und Executive Monitoring sowie Berichterstattung durch. Dieses unterstützt die Analyse und das Feedback einschließlich der

Systematisierungskurven. Das Verfahren wurde in drei Projekten angewendet, die Ergebnisse wurden diskutiert, und neue Herausforderungen vorgeschlagen, um für lokale technische Teams das Katastrophenrisiko zu reduzieren. In regulären Planungsprozessen lokaler Regierungen lässt sich dieses einfügen und ermöglicht konstruktiv den Kapazitätsaufbau, unterstützt und koordiniert darüberhinaus regionale Programme und nationalen Politik.

To my wife Ana Maria,

To our daughters Susanita and Anita Maria,

To our sons in law Mauricio and Jonny and

To our granddaughters Lucianita and Catalinita.

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I like to use this space to thank all the communities where I worked because they taught me their knowledge that helped me to improve my understanding, practice and good attitude towards people impacted by development and emergencies. I also thank the project field teams who were perseverant to discuss long hours to build those indicators for us to learn together to work with quality and be accountable to the communities, local authorities and donors.

I improved the method by teaching it for project planning, therefore I thank the students and colleagues of the Masters of Science Programs of the Catholic University and the CIDES - UMSA in particular those who used the PlaMSyL method for their theses.

Let me thank my lovely family: my wife Ana Maria, our daughters Susana and Anita, our sons in law Mauricio and Jonny and granddaughters Luciana and Catalina for their support and understanding the time for me to be away working with those important communities of praxis.

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List of Abbreviations

CAPYS	Community Committee for Water and Sanitation (for Spanish acronym)
CARE	Cooperative for Assistance and Relief Everywhere
CCC	Core Commitments for Children in Humanitarian Action
CFS	Children Friendly Space
CLE	Local Committee for Emergencies (for Spanish acronym)
COE	Center for Operations in Emergency
CREAM	Clear, Relevant, Economic, Adequate and Monitorable
CRS	Catholic Relief Services
DAC	Development Assistance Committee
DB	Database
DRR	Disaster Risk Reduction
ECHO	European Commission for Humanitarian Aid and Civil Protection
EU	European Union
EVD	Ebola Virus Disease
EW-EA	Early Warning Early Action
FM	Fusion Model
GIZ	Gesellschaft für Internationale Zusammenarbeit
HFA	Hyogo Framework for Action
HIP	Humanitarian Initiative Program
HPM	Humanitarian Performance Monitoring
HRBA	Human Rights Based Approach
ICC	Interim Care Center
IR	Intermediate Results
LACRO	Latin American and Caribbean Regional Office of UNICEF
LF	Logical Framework
LFA	Log-Frame Approach
LGU	Local Government Unit
LTT	Local Technical Team
LW	Lactating Women
M&E	Monitoring and Evaluation
MAM	Moderate Acute Malnourish
MBR	Management Based on Results
MDG	Millennium Development Goals
MoH	Ministry of Health
MoRES	Monitoring of Results for Equity Systems
MoV	Means of Verification
MTT	Municipal Technical Teams
NGO	Non-Governmental Organization
NTT	National Technical Team
OECD	Organization for Economic Cooperation and Development
OICC	Observation Interim Care Center
OM	Outcome Mapping
OVI	Objective Verifiable Indicator
QAT	Quality, Accountability and Transparency
PAE	Emergency Action Plan
PCM	Project Cycle Management
PDH	Project Design Handbook
PlaMSyL	Project Planning, Monitoring, Systematizing and Learning

PME	Planning, Monitoring and Evaluation
PROSABAR	Programa de Saneamiento Básico Rural
PW	Pregnant Women
RBM	Results-Based Monitoring
RCT	Randomized Control Trial
RM	Risk Management
RTT	Regional Technical Team
SAM	Severe Acute Malnourish
SDG	Sustainable Development Goals
SF-DRR	Sendai Framework for Disaster Risk Reduction
SIDA	Swedish International Development and Cooperation Agency
SitRep	Situational Report
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
ST	Systems Thinking
Sys-Curve	Systematization Curve
TED	Web TED Conference a Platform for ideas worth spreading
TT	Time Table
TUB	Technische Universität Berlin
UGR	Unit for Risk Management (for Spanish acronym)
UN	United Nations
UNICEF	United Nations Children´s Fund
UNV	United Nations Volunteer
W&S	Water and Sanitation
WASH	Water, Sanitation and Hygiene
WB	World Bank
ZOPP	Ziel Orientierte Projekt Plannung

Chapter 1 Introduction

The declaration of the Millennium Development Goals in 2000 improved the planning, monitoring and evaluation of development projects by recommending the management based on results while most international organizations were used to the logical framework.

The works of the World Bank on empowerment of local people in 2002 and on the ten steps for monitoring and evaluation systems (Kusek et. al., 2004) contributed even more to the area of management based on results. These works were strengthened with the Declaration of Paris on Aid Effectiveness in 2005.

This chapter explains the United Nations Unfinished Agenda at the end of the Millennium Development Goals in 2015, the increment of disasters and impacts in the last decades, thus giving birth a new complex, dynamic and non-linear paradigm for the Sustainable Development Goals-2030, and so affecting the tasks of planning, monitoring and learning in development projects.

This context defies even more the need for constantly learning for aiming development project results because of the emergent characteristics of the new paradigm 2030. The knowledge acquired in the practice is grounded on lessons learnt from the analysis and feedback of information provided by the task of monitoring activities, products and outcomes obtained in an uninterrupted praxis.

The chapter explains and justifies the purpose of the dissertation to improve and to facilitate a monitoring and learning method to technical teams (LTT[1]) of local governments (municipalities or districts) in developing countries to support the participative resilient development of communities with appropriate projects.

[1] Local technical teams (LTT) belong usually to local government units in developing countries like a municipality or district to support technically the planning and implementation of development projects in communities. Non-Governmental Organizations have similar teams working with communities also.

1.1 Description of the Situation in Development

1.1.1 The Unfinished Agenda

In September 18, 2000, 189 countries had signed in the United Nations (UN) Headquarters in New York the Millennium Development Goals (MDG) to reduce poverty and improve the situation of basic services until 2015 for millions of people in the developing world.

The list of the Millennium Development Goals was:
1. Eradicate extreme poverty and hunger.
2. Achieve universal primary education.
3. Promote gender equality and empower women.
4. Reduce child mortality.
5. Improve maternal health.
6. Combat HIV/AIDS, malaria, tuberculosis and other diseases.
7. Ensure environmental sustainability.
8. Develop a global partnership for development.

Source: UN Millennium Declaration

Assessments were undertaken in the last part of the period to determine the advances toward the goals. And those valuations revealed that in spite of the complications to work all over the world, the developing countries in general had made remarkable advances towards the targets in every country supported by the international community.

For example the UN Report (2013) of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda stated “a deep respect for the MDGs. The 13 years since the millennium have seen the fastest reduction in poverty in human history: there are half a billion fewer people living below an international poverty line of $1.25 a day. Child death rates have fallen by more than 30%, with about three million children´s lives saved each year compared to 2000. Deaths from malaria have fallen by one quarter.”

However, when evaluators disaggregated the target population by gender (girls – boys, women – men), by location (rural – urban), by income group (lower – higher quintile) and by ethnic group (indigenous and non-indigenous) the indicators for the worst off groups were below the national averages.

Following are some examples of inequalities around the world determined by the United Nations. The Figure 1.1 illustrates for example disparities on registered children under 5 years old by wealth quintile.

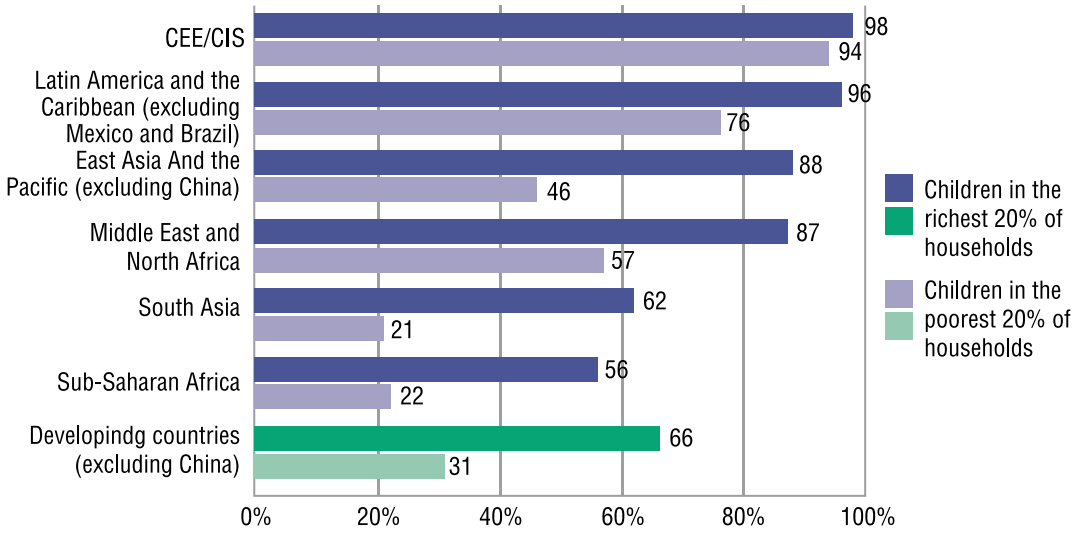


Figure 1.1 Percentage of Registered Children under 5 Years Old by Wealth Quintile

Note: Estimates are based on a subset of 80 countries, covering 60% of the world population (2000-2009). Estimates for the Middle East and North Africa cover 47% of the population of this region. The graph illustrates percentages about the right of children to have an identification card differentiated by wealth quintiles; these estimates should not be used for comparison with other data sets.

UNICEF global databases, 2010, provided by M. Segone and M. Bamberger in the MyMandE workshop on How to design and implement Equity-focused evaluations September 2012.

The next Figure 1.2 displays differences of mortality rates between indigenous and non-indigenous children under 5 years old in different countries in Latin America.

And also the Figure 1.3 revealed if the national average of school-years in Bolivia measured in the same period of the Millennium Goals was 8.6 years, this increased to 14.4 if the school child was a boy, lived in an urban area and belonged to the highest quintile, while the indicator decreased to only 2 years if the school child was a girl, lived in the rural area and belonged to the poorest 20% of the population, which meant also that she might not finish the primary school.

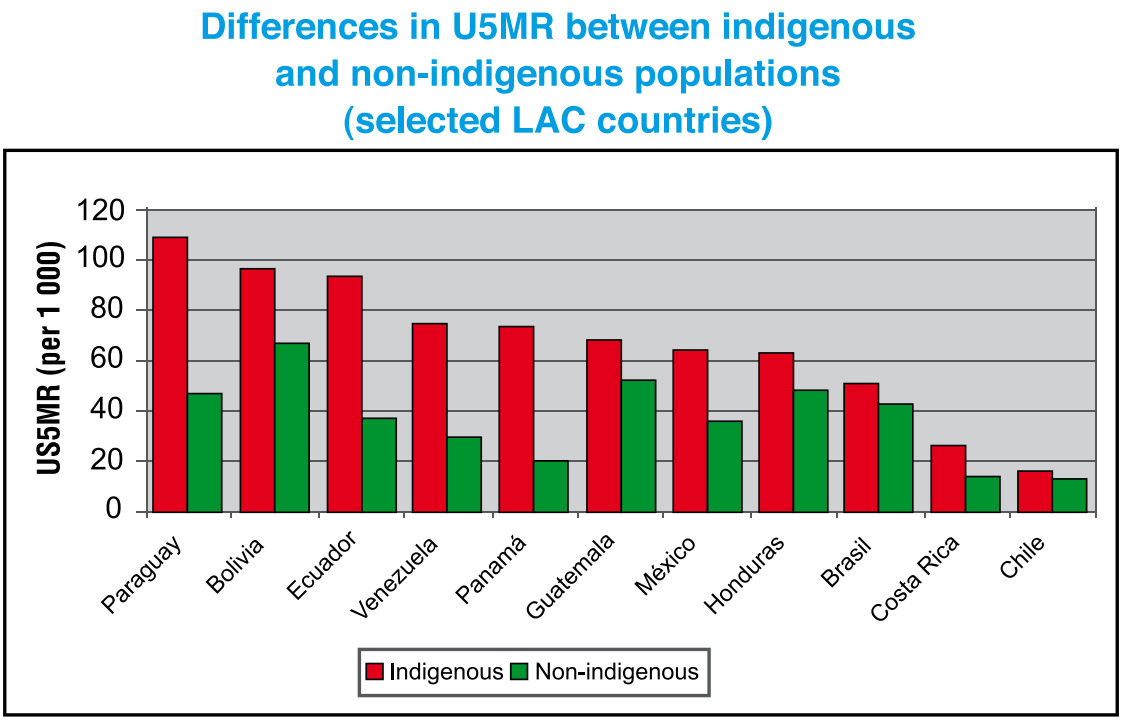


Figure 1.2 Example of Inequalities in Latin American Countries
UNICEF workshop in Panama for planning the new period of assistance, March 2013.

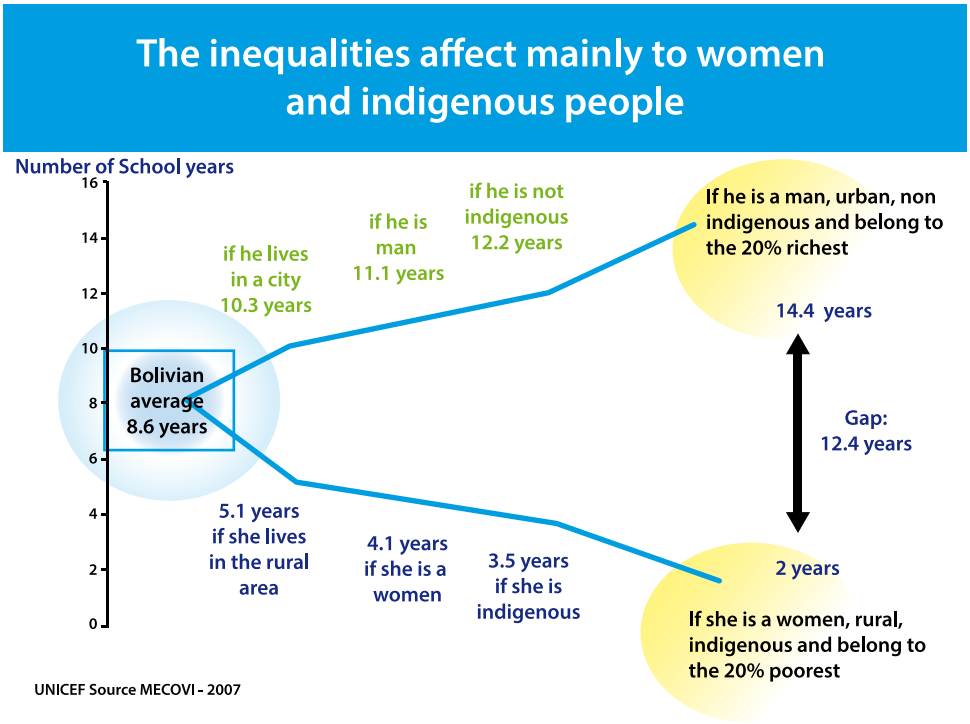


Figure 1.3 Example of Inequalities in Education in Bolivia
Adapted from UNICEF replication workshop in La Paz for planning a new assistance period, July 2013.

The Unfinished Agenda of the United Nations was the result of the analysis of the outcomes of the Millennium Goals and the disparities found by the disaggregation.

Figure 1.4 The United Nations Unfinished Agenda
UNICEF workshop for planning the new period of international assistance, 2013.

These revisions exposed difficulties for the inclusion of different actors in planning, monitoring and learning particularly in projects with the worst off groups.

The documents of the United Nations (UN, 2013) and its Agency the United Nations Children's Fund (UNICEF, 2013) on the Agenda Post-2015 emphasized sustainable development and children rights with insight into the inequalities that still existed among most vulnerable groups e.g. girls, indigenous and children in general.

The UN document proposed five transformative shifts for the analysis of a new agenda:

- Leave no one behind,
- Put sustainable development at the core,
- Transform economies for jobs and inclusive growth,
- Build peace and effective, open and accountable public institutions,

- Forge a new global partnership, where are included national governments, local authorities, international institutions, business, civil society organizations, foundations, social impact investors, scientists and academics, and people.

UNICEF emphasized three key messages for the attention of decision-makers on the Post-2015 development Agenda:

- Sustainable development starts with save, healthy and well-educated children,
- Safe and sustainable societies are, in turn, essential for children; and
- Children's voices, choices and participation are critical for sustainable future.

In summary both documents and others (e.g. Save the Children Fund, 2014) recommended to look for more participation of local stakeholders and to provide monitoring tools for qualitative, accountable and transparent sustainable development process for all, children, women and most vulnerable families.

1.1.2 Negative Effects of Adverse Events

In addition to the challenges for achieving new goals among the worst off groups, the number and impact of disasters have increased in the last decades almost exponentially threatening the achievement of those goals. For this reason was important to follow the recommendations of the Hyogo Framework for Action (2005) followed by the Sendai Framework for Disaster Risk Reduction (2015) to include disaster risk management in the regular plans of development in particular in local programs based on the participation, organization and resilience of communities.

According to the information in Figure 1.5 the annual average of disaster affected people of 243 million during the period 1998-2007 would increase until 2015 in 54% to 375 million. It also indicated that disasters of geophysical, meteorological, hydrological and climatological origin had increased since the early 80's.

The Inter-Agency Standing Committee of the United Nations has sent key messages to the Climate Change and Humanitarian Action Summit in Paris in December 2015 explaining several facts about the impacts in the last decades, as for example:

- Climate-related disasters could affect 375 million people in 2015, compared to 263 million in 2010.
- Between 2001 and 2010, more than 370,000 people died owing to extreme climate conditions (20% higher than the previous decade).
- Globally in the same decade the economic loss related to hydro/meteorological events was US$660 billion, 54% increase compared to 1991-2000.

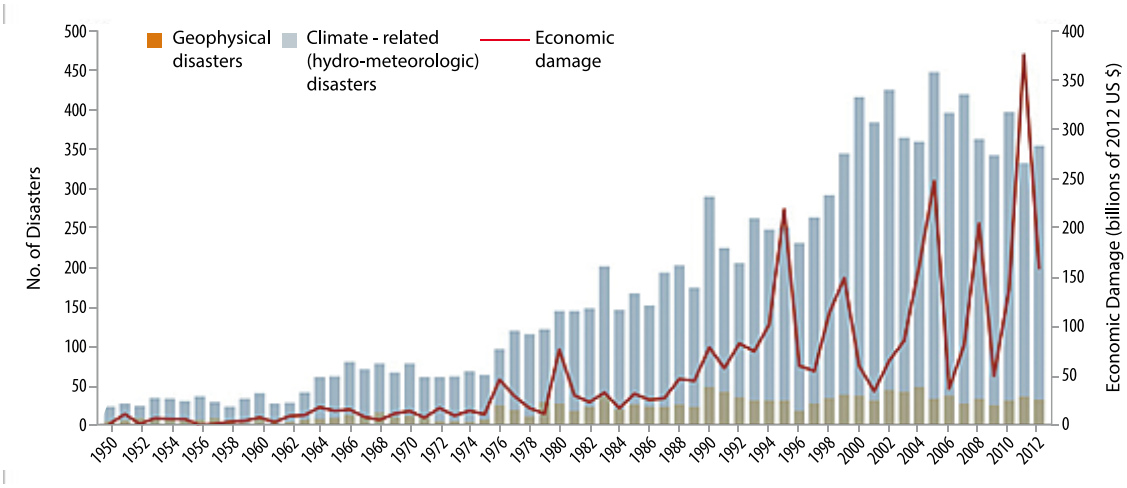


Figure 1.5 Escalation of Disasters between 1950 and 2012
AccuWeather. Steady Increase in Climate Related Natural Disasters

The next Figure 1.6 explains how the disasters affect the advance towards development goals. Thus inequalities increase during emergencies and disasters; and even more, the challenges to achieve the proposed goals because worst off groups live in most vulnerable areas.

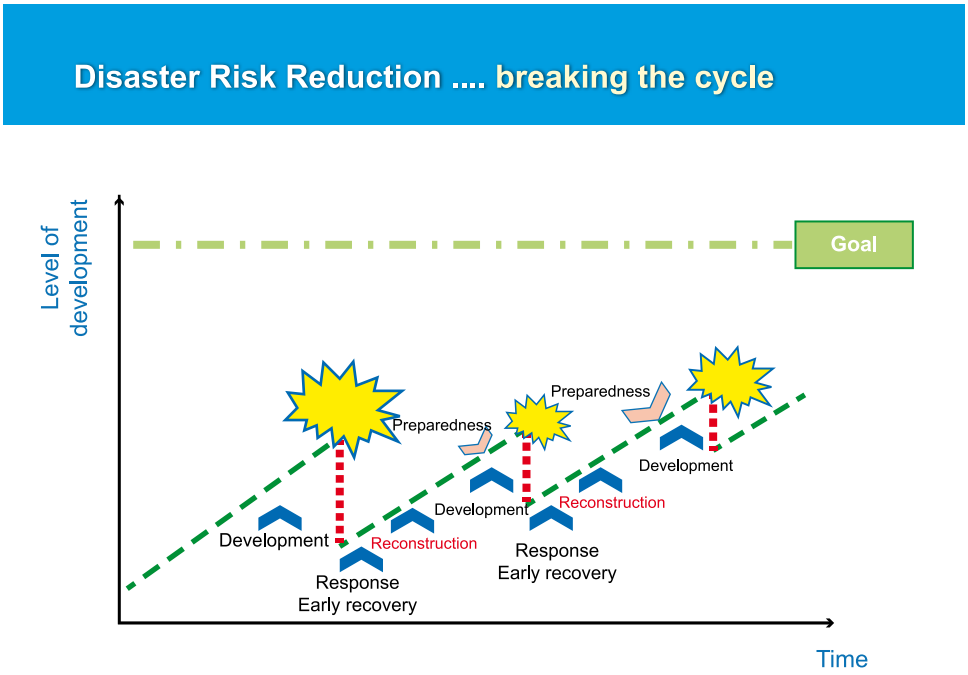


Figure 1.6 Effects of Disasters in the Progress toward a Goal
Adapted from Water-Sanitation-Hygiene Cluster webinar presentation in UNICEF. 15.05.12

It was also important to analyze the way how planning and monitoring were implemented e.g. in urban areas, meanly on those areas where most vulnerable groups lived. In its 34th paragraph the Sustainable Goals declaration stated the recognition of the crucial importance of sustainable urban development and management for the quality of life of people.

In a vulnerability analysis of subsystems the interconnections are disrupted by hazards, wrote Funda Atun in her article (Walloth, Gurr, Schmidt editors, 2014). The drivers of complexity in hazard prone areas were the population and economic growth, increased urbanization, and dependency on infrastructure and increased role of technology in society. Based on the analysis of the large disasters in Kobe 1995 and Katarina 2005, she also said that a feedback on interventions could improve the level of resilience, as for example the analysis of human errors: limited knowledge or cognitive capacity, human resource limitations, inopportunity of solutions in the systems evolvement, and insufficient dissemination of information.

So the challenges for resilient complex cities, wrote Funda, were to recognize the interdependencies between subsystems and elements, knowledge about indirect hazards and enabling flexible adaptation through information feedback. And the probable answers to them: joint and actualize the development and inclusion of Disaster Risk Management, multiple hazards may lead to more casualties, they should be considered explicitly and enable flexibility that provides instant solutions by improving communication networks and collective knowledge including social behavior, individual perception (for decision making) material structures and interdependency. All these concepts are applicable to communities in developing countries as well.

1.1.3 The New Paradigm 2030

On September 25th 2015, 193 world leaders have adopted in the United Nations the new program of Sustainable Development Goals (SDG) for the period 2015 – 2030 to end poverty, protect the planet and ensure prosperity for all. The SDG 2030 were divided in 17 goals with 169 targets to be achieved in the period. These goals aimed to involve more stakeholders like the governments, the private sector, civil society and people.

The new Goals looked to deepen the achieved results of the Millennium Goals in topics such as health, empowerment of women and young girls, education and include also the environmental and governance aspects. The promotion of just, inclusive and pacific societies were key for the Sustainable Goals and the achievement of transparent, accountable and efficient public institutions as well.

The assessments of the Millennium Goals have shown the importance to be inclusive and innovative (UN, 2013) to reach those worst off groups left behind in the previous decades, what is now a large challenge for the civil society, the international organizations and the states to achieve the proposed goals.

This is so, because the poorest communities are whether located in far situated communities or in crowded slams of big cities in developing countries.

The situation presented in this section calls for innovative ways for systematizing development projects (Patton, 2012) with a new focus from different perspective, where ongoing learning should be supported as well social innovation with a sensitivity to the new paradigm emergent issues, and considering the following criteria (Patton, Rogers, Hummelbrunner and Williams 2012, Fetterman 2010, and H.T. Chen 2014):

- Non-linear when small actions can end in large effects,
- Dynamic, where the process is continually changing and
- Complex, where several stakeholders should participate in the decisions making.
- Emphasizing the participation, learning and feedback of worst off groups, their leaders, authorities, and other stakeholders like the donors, the project field team and public authorities.
- Use of an inclusive and bottom-up approach that comprises inter-relationships, perspectives and boundaries, and the criteria of Quality, Accountability and Transparency.

1.1.3.1 The Importance of Local Participation within the New Paradigm 2030

The application of the Subsidiarity Principle since the last part of the XX century (Messner, 1952), required national governments in most developing countries to decentralize the administration of development plans into their regional sections giving local governments autonomy to manage and respond for their own budget to plan and to implement the development of the communities located in their districts.

Some countries afforded to decentralize the administration up to the community level e.g. the Philippines (LGU) or Ecuador (Parroquia), while others reached the municipal or district level e.g. Bolivia (municipal section) or districts in Sierra Leone. An intermediary level of regional government existed also in departments or provinces, which were supposed to coordinate between the national and local governments.

The UN declaration (2015) was based on the participative work that would guarantee that planning of goals, monitoring of performance and achievement of targets with local involvement.

On the other hand it has been expected for years that development would work within a button up approach instead of a top-down strategy (Patton, 2012 and Chen, 2014), which should be implemented to strengthening the empowerment and governance of local communities, leaders and authorities in planning, implementing and learning for reaching the Sustainable Goals (UN-2013 and 2015, World Bank 2002, Fetterman, 2010).

M.Q. Patton (2012) went further and wrote that due to complex systems donors and stakeholders should be aware about the need to cyclically discuss and make decisions among all involved in projects in an innovative way.

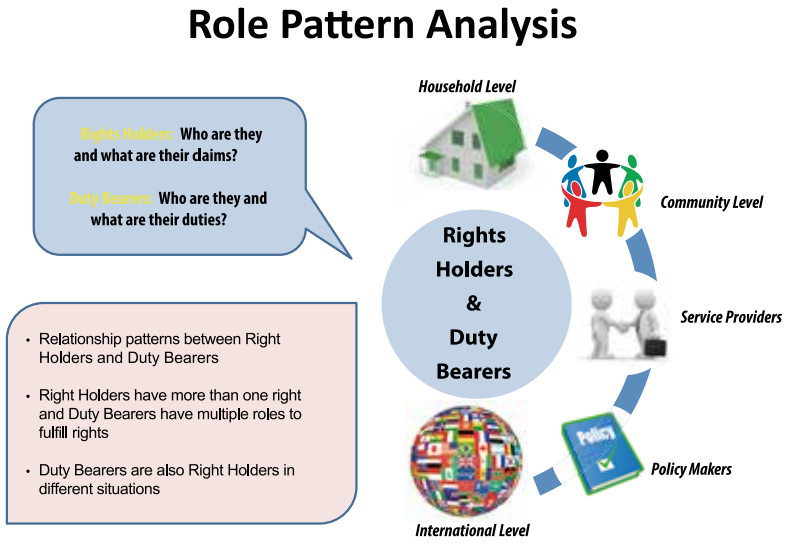


Figure 1.7 Role Pattern Analysis within the Millennium Goals
UNICEF workshop for new program period 2013-2017

A role-pattern analysis was undertaken by UN-Agencies to illustrate the roles of relevant stakeholders for planning a new period of cooperation using a new strategy of Human Rights Based Approach (UN-Habitat, 2014). This involved understanding who was responsible for rights to be respected, protected or fulfilled. It was important to define the right-holders and duty-bearers and their respective roles and relationships in each context. Helping them with such questions like: Who are the right-holders and the duty-bearers and what obligations they are supposed to meet? What is the relationship between right-holders and duty-bearers for the examined development issues, sub-divided to the extent possible – including the levels communal, regional, and national?

Since then, new concepts of Quality – Accountability – Transparency (QAT criteria) were for local teams important to plan and implement new projects, to monitor, systematize and learn to improve results and to reach better social wellbeing.

1.1.3.2 Innovative Criteria of Quality-Accountability-Transparency

Quality is necessary to establish the performance in the implementation of the different levels of a log-frame according to the Objective Verifiable Indicators and SMART[2] targets. And in a more rigorous way, it will have to show the logic of the program theory (or theory of change) and the interconnectivity between the components under the circumstances of emergent changes in a real world (Patton, 2012, Rogers, 2012, Bamberger, 2008, Chen, 2014 and Reynolds, 2012).

Figure 1.8 Levels of Accountability
UNICEF workshop in Panama for planning the new period of cooperation, 2013

It is necessary to find the relation between the stakeholders' responsibility for achieving the goals and the reporting and verifications line for reaching the required level of accountability.

[2] SMART stands for Specific, Measurable, Achievable, Relevant and Time bound

Finally, transparency will be part of an intervention once the information of the project (planned and implemented) is known and understood by the stakeholders in particular by the participant families, their leaders and authorities, and the worst off groups, which the project and the systematization ought to aim. The information should not be directed to funders and authorities only (Patton, 2012), but it should be the evidence about the advances and achievements of the project that benefit the participants mainly. Therefore, it will be necessary to gather and organize the information for stakeholders with an appropriate monitoring scheme according to the indicators and goals.

In addition to that, it was important to raise the levels of governance in developing countries in particular in the last decades with the awareness about a responsible participation facilitating the inclusion of complementary criteria for planning and managing projects with Quality – Accountability – Transparency, which in short is called here QAT criteria. These criteria will be used to improve the Log-frame approach with innovative and inclusive dynamic – non-linear aspects.

1.1.4 The Sendai Framework for Disaster Risk Reduction

The Sendai Framework for Disaster Risk Reduction (SF-DRR) was adopted at the 3rd UN World Conference in Sendai, Japan on March 18, 2015. The SF-DRR is the successor instrument to the Hyogo Framework for Action (HFA) and it was built on elements to ensure the continuity of the advances of States and introduced a number of innovations as e.g. a strong emphasis on disaster risk management instead of disaster management with four Priorities for Action: Understanding disaster risk, Strengthening disaster risk governance to manage disaster risk, Investing in disaster risk reduction for resilience and Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

In addition, the scope of Disaster Risk Reduction has been broadened significantly to focus on both natural and man-made related environmental, technological and biological hazards and risks. (Health resilience is strongly promoted throughout the document). As well as a set of guiding principles, including primary responsibility of

states to prevent and reduce disaster risks, and all-of-society and all-of-state institutions engagement.

The main goal of the last framework is to prevent new and reduce existing disaster risks through the implementation of integrated and inclusive economic, structural, legal, social, healthy, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery and thus strengthen resilience.

The framework articulates also:

- Need for improved understanding of disaster risk in all its dimensions of exposure, vulnerability and hazard characteristics,
- Strengthening of disaster risk governance, including national platforms,
- Accountability for Disaster Risk Management,
- Preparedness to "Build Back Better",
- Recognition of stakeholders and their roles,
- Mobilization of risk-sensitive investment to avoid the creation of new risk,
- Resilience of health infrastructure, cultural heritage and work-places,
- Strengthening of international cooperation and global partnership,
- Risk-informed donor policies and programs, including financial support and loans from international financial institutions.

1.2 The Main Problem and Challenges

Most of the new decentralized and autonomic local governments had to learn how to practice the new challenge of subsidiarity and to be accountable for the own planning, implementation and conclusion of their plans. These local governments regularly had local technical teams (LTT) to plan, implement and monitor local projects. For these tasks they usually worked with the Log-frame, but lately, they needed an appropriate method to keep learning and to improve the results, especially if those LTTs were multi-sectorial.

1.2.1 The Initial Use of the Log-Frame

The log-frame was used by most of the agencies in developing countries since the 70´s for planning and evaluation. This was possible because its qualities for summarizing and synthetizing a project in a simple format. (R. Hummelbrunner in N. Fujita, ed. 2010).

However, the approach to implement the Log-frame during the execution of the projects has stumbled in some difficulties to facilitate the participation of stakeholders. It has been used in a top – down direction facilitating one-path causal analysis if the relation cause-effect would be linear, without a chance to causal loop analysis and feedback with other stakeholders for learning and to improve the results during the implementation of the projects.

There are two main problems in summary for monitoring development projects to be addressed in coming years. First the evolving situation of the development field into a complex, non-linear and dynamic context, worsen with the fact that disasters difficult the advances toward the goals.

Secondly, the tools used for planning and monitoring, thus learning from projects in the past have been mostly based on the Logical Framework. And according to some authors, like Fujita, editor 2010, there are positive critiques to the Log-frame Approach as it is explained in the next chapter.

Problem synthesis: The local project technical teams of agencies, nonprofits and local governments in developing countries have planned and evaluated their projects in the past based on the log-frame. Now, they need a tool for planning, monitoring and learning during the implementation of development projects in a participatory way with different stakeholders and within the new complex, dynamic and non-linear paradigm of the Sustainable Goals-2030.

The area of monitoring & evaluation was focused mainly for informing decision making managers, on evaluation and the accountability about the financial data with little participation of stakeholders in particular the project receivers.

As Mrs. M. Gates co-chair of the Melinda – Bill Gates Foundation stated in Sept. 2010, "... the development community has still lots to learn, … if we want to speed up the achievement of development goals we need to learn from the innovators, … in development the evaluation comes at the very end of the project, I´ve sat in a lot of those meetings, and by then it is way too late to use the data. …" "What nonprofits can learn from private corporations …" in TED.com (2010).

1.2.2 Early Support of International Organizations for Improving the Use of the Log-Frame

The World Bank (WB) and the United States Agency for International Development have also supported the use and improvement of the log-frame in development projects since the late 70´s and early 80's. Later in the 90's, the WB was a leading agency promoting the empowerment of poor people by publishing the book Empowerment and Reduction of Poverty (2002), where they sustained the engagement of the own people in communal projects to improve the level of sustainability of local services as well as to reduce the levels of dependency of communities on foreign aid.

The following definition was given: "Empowerment is the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives".

The author of the WB listed three societal changes for this approach: a change in the mindset, from viewing poor people as the problem to viewing them as essential partners in reducing poverty, a change in the relationship between poor people and formal systems, enabling them to participate in decisions that affect their lives; and a change in formal and informal institutions to become more responsive to the needs and realities of people.

Four key elements were identified in the book to support empowerment of poor people: information, inclusion/participation, accountability, and local organizational capacity. This framework was applied among others in the areas of action: provision of basic services, and improved local and national governance to improve development effectiveness.

In relation to the four key elements promoted above, communities were usually organized for their own social-economic activities what they needed at most was to learn to get and use information, and to learn to be accountable. Thus, the best way might be to start being accountable to them and to facilitate the participation of people in the projects starting in the planning stage, where they could explain the main resources (e.g. organization, participation and materials) and needs they had.

The author wrote also that there was a growing evidence of linkages between empowerment and good governance and growth of more pro-poor and improved project performance.

As a response to the call of the Millennium Goals several international organizations launched their own improved Monitoring & Evaluation tools, for example the Swedish International Development Agency (SIDA) made use of the Log-Frame Approach and all their projects had to count with the Log-frame and the Monitoring & Evaluation plan (K. Örtengren of SIDA 2003).

In its booklet they mentioned that most international development agencies like the UN-System, the Gesellschaft für Interrnationale Zusammentarbeit (GIZ[3]), the Canadian International Development Agency, the United States Agency for International Development, and the Norwegian agency among others encouraged their partners to use the Log-frame Approach when planning, implementing and evaluating a process of change, and a project/program. The Japanese International Cooperation Agency had also

[3] Since 01.01.2011 the International German Cooperation Agency has been renamed as GIZ (Gesellschaft für Internationale Zusamenarbeit), instead of GTZ (Gesellschaft für Technische Zusamenarbeit), which ended its activities on December 31, 2010 and was merged with DED (Deutsche Entwicklung Dienst) and InWEnt.

a similar approach called Project Cycle Management and the Project Development Model for the Log-frame format.

Among international Non-Governmental Organizations (NGO), Catholic Relief Services (CRS) had the Project Package (ProPack) (2004), which served Project Managers and Monitoring & Evaluation officers in CRS to facilitate development partners, mainly NGOs and Caritas Offices the planning and design of projects, and the monitoring and learning process in different areas of the countries with participation of the communities and the project field teams.

The ProPack was based on the original Log-frame, with the addition of a raw in the middle of the Log-frame matrix for Intermediary Results (or medium term Outcomes), which had to be measured with indicators of change. This matrix facilitated the flow of activities like training of community members (e.g. committees or leaders), to the output of number of community leaders knowing new skills for community services and to measure the outcome of the application of the new knowledge for changes and better services to the families.

For example, the activity of workshops for hands-on training of community water committees and water consumers to achieve the outputs of number of water operators knowing to maintain their systems or family consumers learning about the costs to maintain the water services, up to the outcome of the application of the operator´s knowledge and skills to repair and maintain the community water system operating in quantity and quality without interruptions of the water supply with support of the water social fee paid by the families.

The assessments of the Millennium Goals at the end of the period (2012-2013) as it was mentioned in the previous sections showed that the variation of the Log-frame Approach as Management Based on Results (MBR) was not sufficient for solving the problems of participative planning and learning of several stakeholders for better service to worst off groups of girls, women, rural and indigenous people.

1.2.3 Research Questions

This dissertation discusses and proposes the solution to primarily three main questions ¿what kind of tools for planning and monitoring development projects can local technical teams use in developing countries within the new challenges of the Sustainable Goals 2030 paradigm?

Second, how can these teams monitor their projects beyond the implementation into the outcomes level in dynamic, non-linear and even complex contexts?

Third, how can these teams systematize the gathered information and learn to improve the results in a participative and opportune strategy where stakeholders and mainly beneficiaries are part of the decision making process?

It was necessary for answering these questions, to analyze how projects were monitored and evaluated in the past, the challenges of the new paradigm of Sustainable Goals 2030 signed on September 2015 and the worsening scenario by the increasing impacts of the disasters in the world and the need to insert Disaster Risk Reduction into regular local programming.

In this way, the new paradigm was clear, how projects had to be traced with improved Monitoring & Evaluation tools based on new program theories, the Paris Declaration of 2005 and the principles of the Development Assistance Committee of the Organization for Economic Cooperation and Development, making sure to reflect the positive critics to the lineal use of the log-frame.

Then, a proposed monitoring and learning method was justified for a non-linear and dynamic context responding to the criteria of Quality, Accountability and Transparency, working within the new paradigm.

1.3 Hypotheses and Methodology of the Dissertation

Hypothesis 1: The participatory method for Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) responds to the characteristics of a Fusion Model based on the theory of change Plan for Quality-Accountability-Transparency and the Outcome Mapping Log-frame-Tree.

Hypothesis 2: The Project Planning, Monitoring, Systematizing and Learning method can be used to solve the problem and needs of Local Technical Teams for monitoring the implementation and project outcomes, to analyze the advances of indicators, to compare the results to learn with stakeholders and to report in an opportune frequency for management, leaders and local authorities to make appropriate decisions together within dynamic, non-linear and complex contexts.

1.3.1 Steps, Process and Data Use

The research of this dissertation has started with the praxis on development projects during the planning, implementation, monitoring and evaluation phases executed in the decade from 1996 until 2005 with the support of different international donors. The discussion on monitoring indicators with project field personnel was an important input. They were in charge of implementing and reporting the advances of water-educational projects in rural communities. For this, they had to monitor the achievement of the outcomes at different community levels: within families, in schools, and community committees with support of municipal technical teams.

The planning and monitoring of these projects were based on the use of the Log-frame which was a well-known method and at that time it was useful for planning, monitoring and for preparing the evaluation at the end of the projects. Several international organizations had their own matrixes to adequate the Log-frame to the community context and to the requests of donors (e.g. ProPack of Catholic Relief Services, 2004, the Project Design Handbook of the Cooperative for Assistance and Relief Everywhere, 2002).

This participative practice was systematized (Guachalla, 2005, 2008) after ten years presenting useful tools for planning and monitoring. These were based on a new log-frame approach starting with the Plan for Quality-Accountability-Transparency and the Systematization Curve and an outcome mapping, called Log-frame-Tree that served to find a better consistency and coherence between the targets and indicators.

The findings of the first period were implemented in different development and emergency projects between 2007 and 2016 with a second publication at Lund University in 2008 and other reports along those years. In 2012 the UN started the assessment of the advances toward the Millennium Goals, and new discussions enriched the Monitoring & Evaluation (M&E) area and how the Log-frame Approach could be improved with positive critiques from the experts.

Well-known researchers and experts of the field of M&E were invited by international organizations like the United Nations Children's Fund (UNICEF) between 2012-2013 to share their contributions in three series of webinars of 10, 8, and 7 weeks each. After participating on those seminar, it was clear that the systematized and published method in Lund University (Guachalla, 2008) could be a contribution to support local technical teams to improve their planning, monitoring and learning process.

The short list of experts, who participated among others in those webinars organized by UNICEF were: Michel Q. Patton who worked on Developmental and Utilization Evaluations, Michel Bamberger explained his work on Real World Evaluation, Patricia Rogers who published a book on Program Theory and Theory of Changes and discussed the Pro-poor Theory of Change, Martin Reynolds described Critical System Heuristics, Richard Hummelbrunner who belonged to the German speaking countries and published a book with Bob Williams about System Thinking on Action and contributed to the document of Nobuko Fujita in 2010 on the positive critiques to the Log-frame Approach, Jody Z. Kusek Results M&E Coordinator of the World Bank who participated in those webinar with Ten steps for Results-Based M&E Systems, and David Fetterman who worked on Empowerment Evaluation.

With help of these contributions the systematized monitoring system could be well assimilated within the Fusion Models that articulated the Log-Frame Approach with the Outcome Mapping explained in Chapters 2 and 3.

From 2012 until 2016 the new approach called method for Project Planning, Monitoring, Systematization and Learning (PlaMSyL method) was used for monitoring projects on the fields of Education, Health, Nutrition, Water-Sanitation-Hygiene, and Child Protection supported by UNICEF in a large project in five countries of Latin America and two large emergencies do to typhoons in the Philippines and the world emergency Ebola Virus Disease in Sierra Leone. And finally in planning and designing a project proposal for the Office for Humanitarian Aid of the European Union (ECHO) in two complex areas along the border between Ecuador and Colombia.

The following steps were followed for the use of the method in those cases according to the implementation of the projects:

- Determination of the target groups and the problems to be solved with the project.
- Definition of the targets and the indicators with local project field teams and leaders.
- Elaboration of appropriate questionnaires to gather the necessary information to report for opportune decision making.
- Participative gathering of data on the field with project field teams, leaders and community members.
- Empowerment of the local families, leaders and authorities for a participative engagement in the project.
- Translation and tabulation of the data recollected on the field into calculation matrixes on Excel to determine the indicators and advances toward the proposed development targets or worldwide accepted humanitarian standards.
- Complemented analysis drawing the Systematization Curves to help the explanation and discussion of the advances or shortcomings of the indicators toward the targets or standards for facilitating an opportune and better decision among the stakeholders and the project management.

It is important to clarify here that the method adjusts itself to development and emergency projects to be discussed in detail in Chapters 4 and 5.

1.3.2 Wanted Results and Expected Outcomes

Among the wanted results, there is the illustration of the use of the proposed method in a development project, complemented with its utilization in an emergency project and in the planning process of a project in a complex environment.

- To show how the method is systematized to facilitate its use in the future by professionals in Non-Governmental Organizations and local technical teams of municipal and district levels for planning, monitoring and learning in the practice.
- To provide a system that can be applied at local levels and at the same time it could be improved and adequate to new situations in developing countries.
- Professionals will systematize the method in the future even more, achieving the collection of field data with cell phones and automatizing the dynamic databases to calculate and qualify indicators and to prepare opportune reports.

Among the expected outcomes, it is anticipated that:

- Local technical teams of Non-Governmental Organizations and local governments at district or municipal levels will use and apply the method for Project Planning, Monitoring, Systematizing and Learning to improve their own projects with quality, accountability and transparency.
- International donor organizations would see the use of the method as an alternative and innovative approach to be applied for monitoring and learning.
- UN agencies would count with a monitoring method to improve the follow up on the field to strengthen local partners to keep learning from own projects and results.
- Academia, like Universities and Master of Science programs would include in their curricula the monitoring method to teach students how to keep learning thru a monitoring system with dialogue and feedback based on their practice.

- Local authorities and local services learn to dialogue with communities through the use of similar monitoring tools along the process of a fiscal year to be accountable and to improve the services to the communities.

1.4 Short Description of the Chapters

The first chapter explained the United Nations (UN) Unfinished Agenda and the complex, dynamic and non-lineal context of the Sustainable Goals-2030 paradigm, the main problems for project monitoring and learning today and how the international organizations like the UN, multi- and bi-lateral Agencies and large Non-Governmental Organizations have advanced on this field and discussed the posterior shortcomings. It also discussed new criteria of Quality, Accountability and Transparency and stated the hypotheses for the document, within the worsening scenario of disasters in the world.

The second chapter explains and discusses the area of Monitoring & Evaluation (M&E) after the assessment of the results of the Millennium Goals 2015 and the declaration of the new Sustainable Development Goals 2030. It includes the conceptual background, key words, methods and the practice in M&E. It discusses the evaluation methods that have been implemented to support the new challenges of complex, non-linear and dynamic contexts. It also explains in detail the development of new innovative tools like the conjunction of the Log-frame Approach and the Outcome Mapping into a Fusion Model that helps to approach those difficult contexts.

The third chapter describes in detail the Project Planning, Monitoring Systematization and Learning method. First showing the development of the method, then demonstrating that the method fits well within the characteristics of the Fusion Model discussed in chapter 2. Finally clarifies details like how the tools of the method: Plan for Quality-Accountability-Transparency and the Systematization Curve were developed and used based on five static databases, the way how the indicators were calculated and qualified in three dynamic databases to facilitate the analysis, enhanced with the Systematization Curves for opportune reporting and appropriate decision making among stakeholders.

The fourth chapter clarifies how the method and the tools were adequately used in a five-country regional project for strengthening the community resilience in Latin America between 2013 and 2014.

The fifth chapter refers to the use of the static and dynamic databases of the method for internal field reporting in the world large emergency of the Ebola Virus Diseases in Sierra Leone.

The sixth chapter describes how the static databases of the method were utilized in planning a project proposal to the Office for Humanitarian Aid of the European Union (ECHO) in 2016 for the complex border area between Ecuador and Colombia.

Finally the seventh chapter discusses the results of using the tools of the PlaMSyL method in those different cases, showing that the main research questions were responded and the hypotheses demonstrated. It also discusses the expected application and advances in the future recommending new progresses to become a Real Time Monitoring System that can be achieved based on the present PlaMSyL method. In this chapter were also proposed short hands-on trainings for professionals that work with Local Technical Teams, Non-profits and Non-Governmental Organizations. Finally, the chapter proposes a way for including the Disaster Risk Reduction into the regular programing of local governments following the recommendations of the Hyogo Framework of Action and the Sendai Framework for Disaster Risk Reduction.

Chapter 2 Conceptual Framework

The chapter describes the evolution of the Monitoring & Evaluation (M&E) area based on the Paris Declaration in 2005 with contributions of the World Bank and bilateral international organizations like the German and Swedish Agencies for International Cooperation. This chapter explains also and discusses those advances on the M&E tools that were used in the past decade as alternative or improvement to the Log-frame Approach (LFA).

2.1 Introduction to the Conceptual Framework

2.1.1 The Paris Declaration

The document of the Paris Declaration (2005) complemented with the Accra Agenda for Action (2008) stated that "we were making progress, but not enough" and evidence showed that three major challenges had to be addressed to accelerate progress on aid effectiveness and to advance toward the Millennium Goals: Country ownership, Building more effective and inclusive partnership and Achieving development results and openly accounting, for them must be at the heart of all we do (pp.114-115).

One of the main recommendations of the Accra document was to work with all development actors in an inclusive partnership with civil society organizations delivering and accounting for development results and to be more transparent to the publics for results. "Transparency and accountability to their citizens are essential elements for development results" (p.119).

Most organizations were planning their projects based on the Paris Declaration and the Management Based on Results grounded on the log-frame as it is explained in the next section. The Paris Declaration stated the importance of the criteria to plan, monitor and evaluate with quality, accountability and transparency promoting the partnership commitments on:

- Ownership: partner countries exercise effective leadership over their development policies, and strategies and co-ordinate development actions.
- Alignment: donors base their overall support on partner countries' national development strategies, institutions and procedures.
- Harmonization: donors' actions are more harmonized, transparent and collectively effective.
- Managing for Results: dealing with resources and improving decision-making for results. Managing for results means working and implementing aid in a way that focuses on the desired results and uses information to improve decision-making (p.17).
- Mutual accountability: donors and partners are accountable for development results. A major priority for partner countries and donors is to enhance mutual accountability and transparency in the use of development resources (p.18).

2.1.2 Use of Management Based on Results

2.1.2.1 The World Bank Contribution to Management Based on Results

The World Bank (WB) contributed in several ways to the field of Monitoring & Evaluation. One of the most important was the ten steps recommended by the WB (Kusek et.al. 2004) for development practitioners:

- The document emphasized in the beginning the importance to achieve the participation of most if not all stakeholders, for planning and monitoring the project outcomes and goals (p.58).
- It recommended the CREAM[4] criteria for indicators (p.68).
- It also differentiated between monitoring the implementation and Results Monitoring. For the last it recommended the following: Baseline data, indicators for outcomes, data collection on outputs, perception of change among stakeholders, systemic reporting with qualitative and quantitative information, done in conjunction with strategic partners and captured information of success or failure in achieving desired outcomes (adapted from Box iv. p.17).

[4] CREAM stands for Clear, Relevant, Economic, Adequate and Monitorable.

The monitoring of the implementation is done with the Time table or the Gant Chart explained the authors (p.97), this kind of monitoring covers the resources, activities and outputs, measured with input, process and product indicators respectively, these usually are measured through an annual work plan. But a result-based system goes beyond the activities and monitors the expected results given certain periods (usually medium and long term) and levels of achievement: Outcomes (usually at medium term) and Specific Objective (long term outcome), which are registered in a log-frame (p.99).

According to Kusek et.al (2004) every Results-Based Monitoring System needs four basic elements (p.106): Ownership, Management, Maintenance and Credibility. And the data collection should ensure the quality with a certain quality triangle of Reliability, Validity and Timeliness or the monitoring system will diminish (p.108).

In page 111 the authors emphasized the point for analyzing and reporting performance data with certain frequency that yield important, continuous information about the status of the project, even programs and policies. Data also provide clues to problems and create opportunities to improve the project strategy. The diagram of the frequent monitoring data helped to examine changes over time to look for trends, directions and changes, shown in the box of Analyzing Results Data (same page), concluding that the more data points available the more compelling the trends.

Consequently a monitoring system strategy should include clear data collection and analysis plan detailing e.g. location, sources, questionnaire, frequency, data analysis, responsible for data collection, analysis and reporting.

According to the authors (p.126) the characteristics of a quality evaluation are: technical adequacy, impartiality, usefulness, stakeholder involvement, value for money, feedback and dissemination.

The authors of the World Bank also wrote that analyzing and reporting performance findings is a critical step because it determines what, when and to whom it is reported. They mentioned that “evaluators too often give this step the least thought” (p.129).

They said that it is important to have clear what the audience of the report will be, so that data should be presented in a short and crisp manner and be relevant to the target audience, only the most important data should be presented (p.131). Typically, they wrote, the higher up the chain of command, the less need there is for extensive detail and explanation; aggregated, succinct data relevant to the specific issue will be more appropriate.

The table on Outcomes Reporting Format (p. 133) showed a simple reporting format of Actual outcomes versus Targets with the headings: List of Outcome indicators – Baseline – Current – Target – Difference (all in percentages). The authors clarified that the comparison over time is critical. They gave four reporting dimensions: written summaries, executive summaries, oral presentations and visual presentations.

Feedback – Knowledge – Learning (Kusek, 2004, p.140):

Using findings to improve performance is the main purpose of building a results-based Monitoring & Evaluation System, wrote the authors. Findings can be used for many purposes e.g.: accountability, to allocation of resources, performance problems correction, motivate personnel, for efficient services, and communicate better with public.

In relation to the use of monitoring information the authors stated (p.140) that better decision making will result from taking the time to monitor, measure, and incorporate the findings into the decision making process. As a corollary: if one starts to ask for performance information, improved performance will result.

The Monitoring & Evaluation (M&E) Systems constitute (p. 140) a powerful, continuous public management tool that decision makers can use to improve performance and demonstrate accountability and transparency with respect to results. “Feedback, as distinct from dissemination of evaluation findings, is the process of ensuring that lessons learned are incorporated into new operations” (Organization for Economic Cooperation and Development 2001, p. 60). Here the word of evaluation can be changed for monitoring, with the clarity that feedback of monitoring findings ensures

also that lessons learnt are incorporated into new operations, probably with more certainty because of the above recommended frequency for reporting data.

The authors said (p. 143) that the new emphasis in the international aid community is more and more on local knowledge acquisition, not knowledge transfer from donor to recipient. And “Learning has been described as a continuous dynamic process of investigation where the key elements are experience, knowledge, access and relevance. It requires a culture of inquiry and investigation, rather than one of response and reporting” (United Nations Development Program 2002, p.77).

New knowledge can be generated through the use of findings on a continuous basis. And systematization assists to catch the knowledge produced by the practice. Therefore, knowledge management means capturing findings, institutionalizing learning, and organizing the wealth of information produced continually by the M&E system (p.143).

Finally the six critical components of sustaining Results-Based M&E Systems are: Demand, Clear Roles and Responsibilities, Trustworthy and credible Information, Accountability, Capacity and Incentives.

2.1.2.2 The Log-frame Approach for Management Based on Results by Other Agencies

R. Hummelbrunner in (Fujita, 2010) made a clear explanation about the variation of the Log-frame Approach called ZOPP (German abbreviation for objectives-oriented project planning, 1983) by the German Agency for International Cooperation (GIZ). The method included some new elements like participation of stakeholders in workshops using the metaplan (cards) technique (p.24).

He also made a useful distinction between the logical framework (log-frame, LF), which is the matrix that digests the main elements of an intervention and connects them to each other (p.2) and the Logical Framework Approach as the process by which these elements are formulated.

The Log-frame has a reasonably standard form with vertical and horizontal logics, in the vertical a hierarchy of objectives – activities deliver outputs, which contribute to

outcomes that can be medium term showing the changes or long term as the specific objective that explains the impact (p.2) that help to bring about the overall goal. And the horizontal logic explains the indicators and means of verification to show progress against each objective and the external factors (assumptions and risks) that may affect the achievement of the objectives at next level.

The Log-frame Approach is concerned, writes Hummelbrunner (p.2), with the procedures of problem analysis, the development of objectives and indicators, and the identification of risks and assumptions. In general this process should be participatory, involving key stakeholders to reach consensus on the intervention.

According to the author some issues like the cross-cultural work brought modifications and GIZ re-launched ZOPP in 1995 as Project Cycle Management (PCM) following the steps of the Directorate General for External Aid of the European Commission (p. 9), which later would include also the concepts of quality and effectiveness. These methods took on new importance with the formulation of the Millennium Goals (2000) and the Paris Declaration (2005).

In the past the quality assurance of ZOPP or PCM later, was based on detailed, goal oriented and logical project planning (quality at entry). The practice led later to a stronger focus on development results (quality at exit), consequently managing for development results has been enhanced at all levels of project work (p.25).

So the main questions were during the period of planning and managing by results p.26:

- Which areas may be affected by the project´s activities and outputs?
- Is the project about to achieve its intended results?
- Are there any unintended (positive or negative) results that need to be addressed?
- What changes can be observed in the project environment and can be plausibly attributed to the project?

Since then all M&E activities geared towards the analysis of two perspectives: the effect the environment has on the project and the extent to which the project contributes to changes in the environment.

In the last years and due to the increasing complexity of the development work, GIZ has developed a new management model called Capacity WORKS, which is intended to respond to changes in the aid architecture and stakeholder landscapes. The key points of this new approach are the objectives and results jointly agreed with partners and the results chains as vital tools in this process.

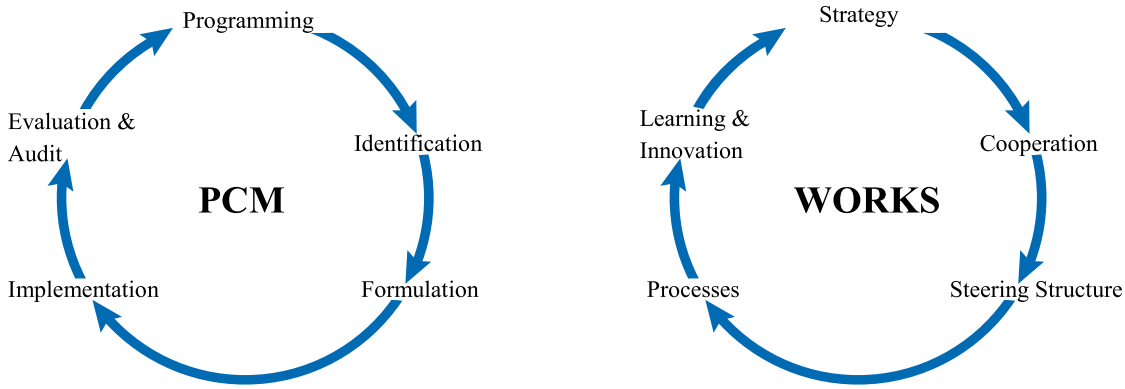


Figure 2.1 Progress of Project Cycle Management Phases to the Success Factors of Capacity WORKS
Adapted from R. Hummelbrunner, 2010.

The five success factors exposed in previous Figure 2.1 are: Strategy, Cooperation, Steering Structure, Processes and Learning and Innovation p.29. Finally R. Hummelbrunner explained that the Log-frame Approach has been retained in the new method Capacity WORKS p.29 because it is still used quite widely within the development community and continues to be a methodological “anchor”. So, the PCM represented in a circle evolved into the Capacity WORKS factors of success.

The author concluded his remarks writing that the Log-frame Approach (LFA) offers a middle path (p.31), because it is a component of results base management but also allows for intense stakeholder participation, at least at the planning stage. In general, he wrote the LFA can be used in simple situations and even in complicated, including multiple actors or dynamic contexts with much caution and should be complemented

with other methods. Furthermore, in complex situation displaying recursive causality or emerging outcome, Log-frame Approach is best not used at all.

Here, it would be important to make the difference between complex context where several stakeholders need to participate and complexity due to emerging outcomes. Because as other authors proposed below, LFA can be used in combination with other methods even in complex contexts of several participant stakeholders facilitating the analysis of causal loops.

Molund and Schill for the Swedish International Development Agency (SIDA, 2007) defined monitoring as the continuous follow-up of activities and results in relation to pre-set targets and objectives.

They showed some differences between Monitoring and Evaluation (Box 1 p.13) saying that monitoring is continuous or periodic while evaluation is episodic, ad hoc (usually at the end of a project). Monitoring is focused on intended results and quantitative methods, while evaluation on intended and unintended results and uses qualitative and quantitative methods.

The authors explained that SIDA regards evaluation as a complement to monitoring. (p.13). Monitoring can be done at different levels: inputs-outputs but also of outcomes and impacts (more often for outcomes). Outcome monitoring measures the extent to which intended beneficiaries have access to outputs and are able to put them to good use.

The authors showed in (Box 2 p.14) that monitoring goes from the level of inputs all the way up to the level of impacts following outputs and outcomes as well, the point here would be the kind of appropriate indicators and the frequency for monitoring.

They stated also that evaluation serves two broad ends: accountability and learning. However, monitoring serves these two ends as well and it may be more important to search for accountability and learning during the implementation of a project, when adjustments can be opportune and not only at the end.

They emphasized (p.14) the difference between financial accountability referred mainly to respond for the allocation of funds, while Monitoring & Evaluation (M&E) respond to performance accountability that concerns results. They mainly referred to evaluation, and recognized that monitoring may serve equally well for routine reporting of outputs and easily measured outcomes. Monitoring can be emphasized here because as it was commented by M. Gates (2010) evaluation results are often available at the end of projects. While the monitoring data can help to look for those performance indicators (from inputs up to outcomes) often and opportunely.

Although learning, in itself may be regarded as valuable, its real importance lies in the translation of new knowledge into better practice (p.15). Evaluations that are primarily meant to contribute to learning are often called formative, whereas evaluations for accountability are described as summative evaluations. Noting that the distinction is given by the use of the evaluation more than the contents.

Another type of evaluation mentioned by the authors of SIDA is the participatory evaluation, which is a modality where participants, community members and project staff, are empowered in a collaborative continuous and iterative process of data collection and analysis with simple qualitative and quantitative methods not sharply distinguished from monitoring.

Objectivity p.20 – truth and impartiality – is valued in participatory M&E and it allows participants to engage in open reflection on public good, it can also be seen as a kind of self-education in democratic governance, part of the empowerment process proposed by the WB above.

Finally, the Swedish International Development Agency advised for reporting to present main findings and conclusions up-front and use the rest of the report for more detailed analysis, to focus on readers' interests, when learning is the purpose, highlight the unexpected, the negative findings constructively and the problematic, use tables and figures to facilitate understanding.

2.1.2.3 Project Monitoring among International Non-Governmental Organizations

In the early 2000´s most of international Non-Governmental Organizations like the Cooperative for Assistance and Relief Everywhere (2002) and Catholic Relief Services (2004) implemented Monitoring & Evaluation programs and trained their project personnel. An example of the first steps was the monitoring Table 2.1, which was prepared in the planning stage.

This table was used to report to management, to improve financial issues and for backing the field team. Those processes were supported by USAID which made important contributions to the area of Monitoring & Evaluation as the GIZ did with ZOPP and other improvements.

Table 2.1 Example of a Table for Monitoring

Level of project hierarchy	**Operational indicators** Measures from the logic model used to ascertain or verify that a planned change has occurred.	**Data needed** What specific data will be necessary to characterize the indicator? Depending on the indicator, one or many types of data (variables, types of evidence) may be needed	**Time frame** How often will data be collected? (e.g. at baseline and project end? Monthly or Quarterly?	**Source / collection** From where and how will the data be collected? (e.g. household survey, community PRAs, district-level secondary data)	**Data analysis** How will the data be analyzed? (e.g. statistical tests, tables, cross-tabs, graphs)	**Dissemination / utilization** What reports will be generated from the information? How and with whom will it be shared and used to improve the project?	**Responsibility** Who is responsible for data collection and analysis?
Impact goal							
Effect objectives							
Outputs							
Activities							

Adapted from Caldwell (2002).

In summary, the M&E field has evolved in the last decades in particular the Evaluation area for financial accountability and reporting for management decision making.

2.1.3 Use of the Log-frame Approach with Communities, Schools, Project Field Teams of Non-Governmental Organizations and Municipal Technical Teams

During the implementation of a water-sanitation-hygiene program with 1,175 communities, schools and their municipalities, Catholic Relief Services (CRS) assisted field teams of implementing partners like Caritas or local Non-Governmental Organizations (ONG) with the project and Monitoring & Evaluation (M&E) officer to

discuss and improve the list of indicators, to define targets and to monitor and report to different donors like UNICEF, PROSABAR (a World Bank supported national program in water and sanitation) and Plan International. This program covered different regions in Bolivia from 1996 until 2006.

The M&E method used by CRS at that time was based on the log-frame approach and was called later ProPack, they basically added a new raw to the original log-frame for intermediate results to be measured at outcome level by change indicators. In this way it was possible to include activities such as training of community families, water committees and school community (teachers, pupils and parents) and monitor their changes on hygiene habits at family and school levels plus the accountability of water committees and municipal technicians.

The use of the indicators was discussed with the project field teams at least every two months to measure the advances toward the targets of the expected outcomes at family, community and municipal levels. As a result, the use of process indicators was clarified for measuring activities, outputs and change indicators for outcomes.

These discussions were rich on innovative ideas to define three criteria for each family indicator to measure objectively the use of the water taps, hand washing, cleanness of the latrines and house yard, and maintenance of water at home, garbage disposal and payment of the monthly fee for operation duties. In a similar way the water committee tasks were monitored at the levels of the operator (monitoring visits -maintenance-repairs) and treasurer (collecting fees, presenting financial reports and maintaining a supply stock).

The indicators of the project were first qualified within a scale from 1 to 3:

Qualification of Indicators	
Good	3
Regular	2
Low	1

Consequently, the promoters and leaders of the communities could qualified with objectivity (Molund, 2007) any of the family water-sanitation-hygiene (WASH) indicator with 3 if all 3 criteria of the indicator were achieved by the family, with 2 if two criteria and 1 if only one criterion was done well. For example, for the use of the water tap, the criteria was: fest stand, not dripping and existing valve in good condition.

In this way, the qualification of the indicators by family and community was objective and consistent along the period of the project in each community. Later the field team discussed the possibility to disaggregate the scale from 1 to 3 up to 1 to 5 because some refined differences existed between indicators of families or communities, see more discussion on this topic in Section 3.2.2.

A parallel practice at school level made possible to transfer the task for monitoring the family indicators to teachers and children. So, they built their own monitoring teams to measure the improvement of the WASH indicators at family level as next pictures illustrate.

This experience enlightened the project, because those school children had monitored Water-Sanitation-Hygiene indicators for reporting the advances on family results to their communities with quality and transparency (Guachalla, 2005 and 2007), even though they were not accountable for it.

Figure 2.2 School Children Monitor Water-Sanitation-Hygiene Indicators in Communities.
Lacaya Baja – Pucarani Bolivia 07.12.2005. Guachalla.

A scheme of 3 x 3 fitted well to organize the field team for monitoring the activities with process indicators, the outputs with product indicators and the outcomes with change indicators. Thus, the promoters measured the process indicators at a weekly basis, the officers for social and technical areas did the advances of outputs verifying the information of the promoters every month and the field team coordinator, who measured the advances of the outcomes and verified the information of the field team at least every two months, see also Figure 3.3.

With the progress of this Monitoring & Evaluation system, the field team of promoters started using hand devises to gather community information on WASH indicators as the next figure illustrates and reduced the reporting period to the office from one month to one week (Guachalla, 2006).

In this line, the field team was able to use the Log-frame in a participative manner and to transfer it to community committees to use indicators and targets for reporting to the community as well as to empower them to work together with project teams and the municipality. This last accompanied, when possible, the learning process to monitor the water committees and to support the communities.

Figure 2.3 Promoters of Field Team Collecting Data of Indicators with Hand Device and Paper Format. Guachalla, 2006.

The next figure is an example of the time saving for data transfer that the field team achieved by using hand devises reducing the interval from one month to one week.

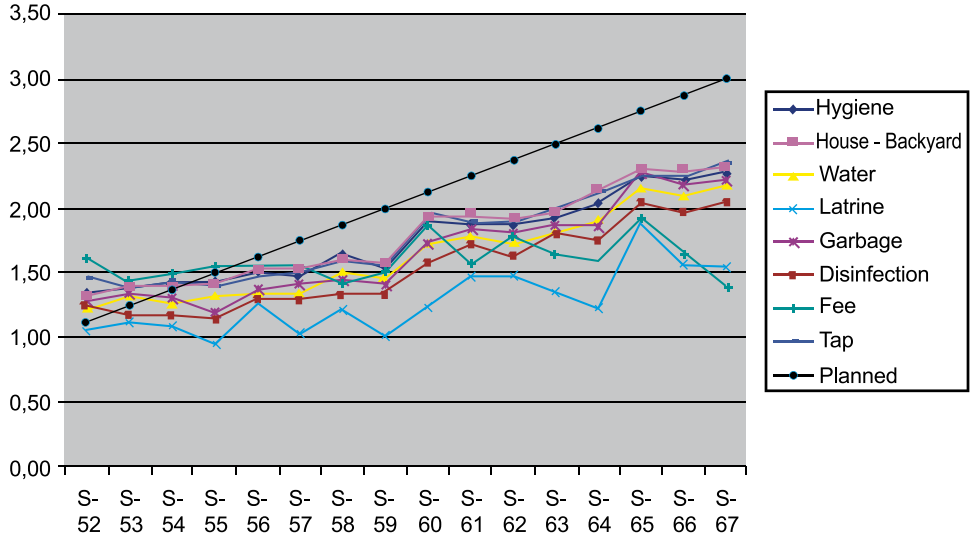


Figure 2.4 Weekly Water-Sanitation-Hygiene Indicators in a Period of 16 Weeks
Guachalla, 2006.

2.2 Positive Critiques and Alternatives to the Use of the Log-Frame Approach

A constructive critique about the use of the Log-frame Approach in the last decade was based on the following issues (Fujita, ed. 2010):

- The supposed lineal trajectory defined by the indicators.
- The almost inflexible practice for using and managing the log-frame.
- Some stakeholders (usually donors) defining the use and the application by others (usually implementing counterparts) with little or no participation of other important stakeholders as for example the communities and their leaders and authorities.

Nevertheless, the log-frame served to develop new methods to adjust and improve these issues in new monitoring and evaluation tasks, as some specialists of the field have shown during the three webinar series on Monitoring & Evaluation (M&E) organized by UNICEF and EvalPartners between 2012 and 2013 with support of the Claremont Graduate University and sponsored by the Rockefeller Foundation.

Among these authors were Michel Q. Patton, who wrote Developmental Evaluations (2011), Bob Williams, Richard Himmelbrunner, and Patricia J. Rogers, who contributed to the document of Narita Fujita ed. in 2010. These last authors have also their own publications on the field of M&E: on Systems (B. Williams and R. Hummelbrunner 2010) and P. Rogers in Program Theory, Theory of Change and Logic Models with S. Funnell (2011) plus Michel Bamberger and Jim Rugh, who wrote on Real World Evaluation (2010) and D. Fetterman on Empowerment Evaluation (2010).

International nonprofits and United Nations' (UN) agencies strengthened their M&E systems in the past decade to increase the numbers toward the Millennium Goals. For example the UN proposed the Human Rights Based Assessment and UNICEF based on it developed the method Monitoring Results for Equity Systems for its regular program and in 2010 published the Humanitarian Performance Monitoring toolkit for large emergencies.

2.2.1 Alternatives to the Log-Frame Approach

As mentioned above, professional experts of the M&E field discussed improvements for the Log-frame Approach, despite that most of them were focusing the topic of Evaluation; nevertheless, they emphasized the need of constant participatory analysis for better achievement of goals in a real world context, enhancing Monitoring also.

2.2.1.1 Developmental Evaluation

M.Q. Patton wrote on the webinar reading material on Developmental Evaluation (2012) as discussed in his book (2011) concepts on evaluation that are worth replicating here because of his large experience to support the dissertation.

The author stressed the need to focus projects from a different perspective, where ongoing learning should be supported as well as social innovation, adaptive management and increased effectiveness (p.102) informed by systems thinking and a

sensitivity to complex nonlinear and dynamic context. This kind of context appeared, wrote the author e.g. in fighting poverty, chronic diseases, victims of natural disasters and war.

Developmental evaluation explores the frontier, continued the author, under conditions of complexity and supports innovation in development to guide adaptation to emergent and dynamic realities in complex environments. Innovation can take the form of new projects, programs, products, organizational changes, policy reforms (Patton, 2012).

A complex system is characterized by a large number of interacting and interdependent elements in which there is no central control (p.102). This process, Patton stated, includes gathering real-time data to inform ongoing decision making and adaptations (p.105), self-organizing and emergent behaviors based on information processing generate learning, evolution, and development (Mitchell, 2009, coded by Patton).

He clarified the concepts: non – linear when small actions can end in large effects, dynamic, where the process is continually changing and complex systems where several stakeholders should participate in the decision making process (taken from his webinar).

Patton wrote also that traditionally approach to accountability focused on and directed to external authorities and funders, whether resources were used as planned and whether targeted outcomes were attained. This is a static and mechanical approach to accountability (p.110) that assumes designers know, three or five years in advance what important outcome to target and how to achieve those outcomes. Related to this, he also argued that imposed specific, monitorable, achievable, relevant and time bound objectives prematurely can in fact do harm by limiting responsiveness and adaptability (p.103).

Accountability in Developmental Evaluation places the emphasis on understanding, supporting, and documenting adaptations and their implications, not evaluating rigid adherence to planned implementation and preconceived outcomes. Because complexity-sensitive evaluation assumes that plans are fallible, based on imperfect information and

assumptions that will be proven wrong (p.111), and that development occurs in dynamic contexts where even good plans will have to be adapted to changing realities.

Patton wrote that his method is particularly appropriate to ongoing development in adapting a project, program, strategy or policy to new conditions in complex dynamic systems, or to adapting effective general principles to a new context in the dynamic middle between top-down and bottom-up forces of change and for developing a rapid response in the face of a sudden major change or a crisis, like a disaster or financial meltdown, exploring real-time solutions and generating innovative and helpful interventions for those in need (p.109).

The author explained that developmental evaluation views development interventions like dynamic and emergent in complex adaptive systems (p.109). Both the intervention and the evaluation are dynamic and adaptive. This, he wrote, stands in stark contrast to impact evaluation that uses randomized controlled trials because this conceptualizes interventions as occurring in a closed systems as static and mechanical cause – effect in a simple linear model. In contrast, development more often occurs in complex dynamic systems and puts a premium on understanding context, real time adaptability, and ongoing development.

Developmental Evaluation supports learning to inform action that makes a difference, this often means changing systems, which involves getting beyond surface learning to a deeper understanding of what is happening in a system (p.105). To understand how the system, that need change is operating and to make the variations that change the system itself, by getting beyond temporary and surface solutions, this involves double-loop learning.

In single-loop learning, people, wrote Patton, modify their actions as they evaluate the difference between desired and actual outcomes, and make changes to increase attainment of desired outcomes. In essence, a problem-detection-and-correction process, like formative evaluation, is single-loop learning (p.106). In double-loop learning, those involved question the assumptions, policies, practices, values, and system dynamics that

led to the problem in the first place, and then intervening in ways that involve the modification of underlying system relationships and functioning.

Making changes to improve immediate outcomes is single-loop learning; making changes to the system to prevent the problem or embed the solution in a changed system, involves double-loop learning. Triple-loop learning involves learning how to learn, and is embedded in the processes of Developmental Evaluation (p.106).

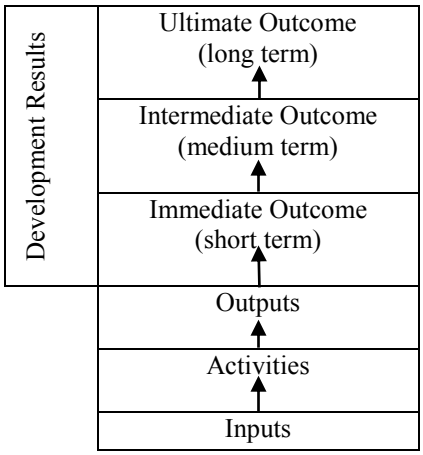
2.2.1.2 Program Theory and Theories of Change

Patricia Rogers and Richard Hummelbrunner participated in the webinar series in 2012 and 2013, during the presentations, she explained different models that were used to analyze the inclusion of worst off groups in planning, implementation and monitoring of development projects. The following remarks were taken from the reading material (Rogers et.al, 2012, pp.142-171).

The authors explained four kinds of representations of Program Theory: a results chain, a log-frame, an outcomes hierarchy, and a realist matrix (p.143). A results chain is a common form which represents an intervention in terms of inputs, processes, outputs, outcomes and impact (p.143).

The log-frame in Figure 2.5 is a particular form of a results chain and is part of a log-frame approach used widely in international development. The classic version (p.144) has four components in the causal chain (Activities, Outputs, Purpose and Goal) and for each of these sets out a narrative description, Objectively Verifiable Indicators, Means of Verification and Assumptions. Some authors (Hummelbrunner, 2010) made a difference between Risk as the possible negative factors and Assumptions as the positive factors to help to achieve the next level of goal within the Log-frame.

Results Chain Logic



Log-Frame Chart

Project Structure	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Goal			
Purpose			
Output			
Activity			

Figure 2.5 Results Chain Logic and Log-Frame Chart
Rogers and Hummelbrunner in webinar series of UNICEF, 2012.

An example of a Simple Program Theory Model in next figure was given by the authors (p.154) and also by Bamberger (2008).

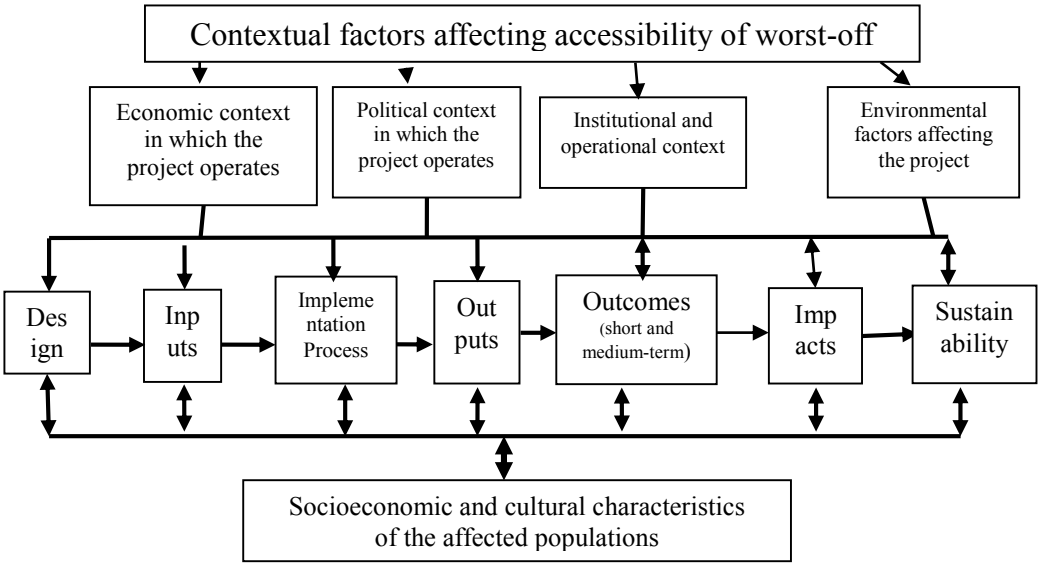


Figure 2.6 A Simple Program Theory Model
Bamberger (p.12, 2008).

They explained that every project is designed and implemented within a unique setting or context that includes local and regional economic, political, institutional and environmental factors as well as the socio-cultural characteristics of the communities or

groups affected by the project. The program theory must incorporate all these factors through a contextual analysis.

Rogers and Hummelbrunner (2012) discussed and proposed new ways of representing the advance towards the achievement of goals specifically pro-poor within development projects as for example the Figure 2.7 responding to a situation of non-linear, complex, dynamic system.

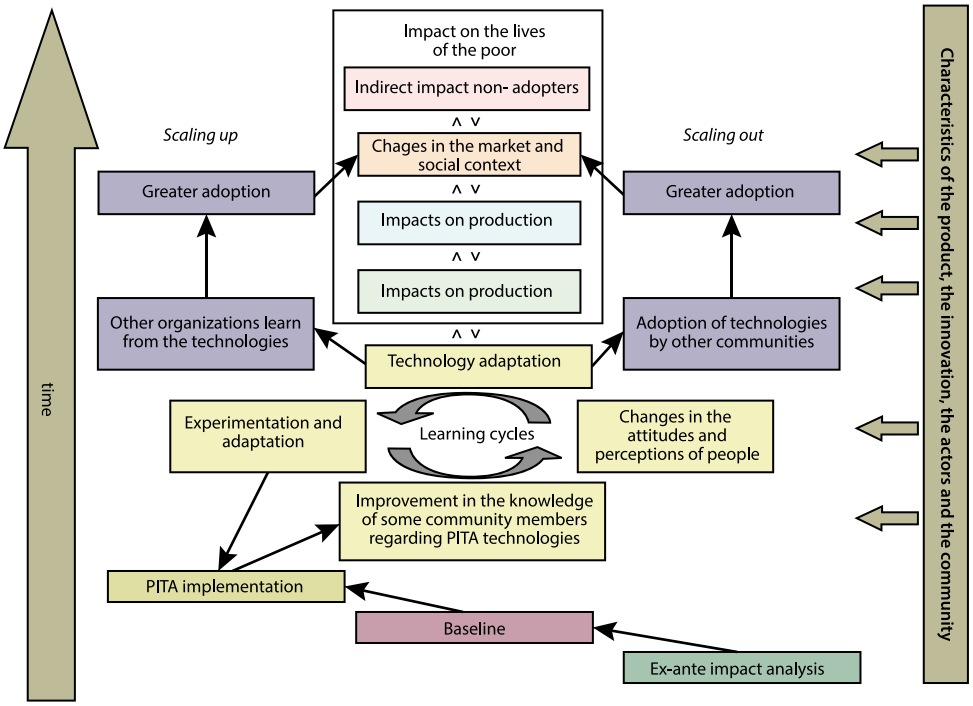


Figure 2.7 Example of Program Theory Pro-Poor
Adapted from Rogers and Hummelbrunner, (2012, p.156) and in UNICEF webinar series, 2012

People are agents of their own development, therefore are main stakeholders among others (donors, authorities) and the systems are not simple or linear or static anymore, but rather complex, dynamic and non-linear. Support the poor and marginalized to be agents of their own development, not passive beneficiaries, wrote the authors (p.146).

The authors explained that some complex aspects can also be represented via logic models, but for capturing non-linear relationships, other forms of representation can be used as Feedback mechanisms or the Causal Loop Diagram, or in cases of learning, cycles that connect the corresponding activities and outcomes (Rogers, 2012 p.155).

P. Rogers defined theory of change as the central processes or drivers by which change comes about for individuals, groups or communities (webinar presentation 2012), proposing the following key issues:

- Developing program theory
  - Understand how change comes about,
  - Understand program and its environment,
  - Involve different stakeholders,
  - Change it as needed.
- Representing program theory
  - Choose appropriate format and incorporate assumptions,
  - Capture different perspectives.
- Using program theory
  - Develop indicators appropriately,
  - Disaggregate data,
  - Support knowledge translation,
  - Adapt the program theory as needed.

In p.159 the authors indicated that when capacity building plays a major role in interventions, Outcome Mapping (OM) is a suitable way to articulate the underlying program theory with a focus on one specific type of outcome. In the last years, some authors have attempted to fusion the results-oriented focus of Log-frames with OM´s process-oriented learning pathways, explained also in next section 2.2.1.3 of the Fusion Model.

In the section of implications for using program theory, the authors explained a few important concepts. Program Theory needs Specific, Measurable, Achievable, Relevant and Time bound indicators (p.162), what is widespread in international development for indicators in results-based management, that are variables for measuring achievements and changes connected to an intervention.

Indicators not only vary according to the time period when they are used, but also according to the characteristics of an intervention: in case of complicated aspects, indicators should enable monitoring of effective practice, relevant factors and context conditions. For complex aspects, indicators should allow for documenting initial conditions and – in combination with assumptions – capture emerging phenomena (p.163).

The authors distinguished between knowledge transfer and knowledge translation. The first can be used in a new setting without making any changes to the intervention, in second case this knowledge has to be adapted to suit the new situation (p.167).

Finally, the authors recommended to adapt the program theory as needed, so it should be dynamic, subject to changes, otherwise Program Theories risk being out of touch with the implementing reality and will not achieve their function to guide Monitoring & Evaluation or to adapt to emerging challenges and opportunities. If, they warned, Program Theories are not up-dated, they tend to be fixed and thus prevent learning and adaptation for future work.

Patton, Rogers, Hummelbrunner and other authors like Kusek (2004) recommended to reach levels of Quality, Accountability and Transparency providing new thinking on Theory of Change as the previous examples to respond better to new challenges of projects where monitoring and learning will help to improve the results as it is proposed in this document.

2.2.1.3 The Fusion Model

The Fusion Model integrates the results-oriented focus of Log-frame Approach with the Outcome Mapping process-oriented learning pathways on behavior change and should make possible to determine the distribution of roles and responsibilities of development actors directly in the logic model (i.e. table or matrix).

Key requirements for this model have been discussed by Rogers and Hummelbrunner (2012, p.159) and R. Hummelbrunner in N. Fujita (ed.) (2010, p.17-19). Williams and Hummelbrunner have also contributed on Outcome Mapping in section 2.2.2.

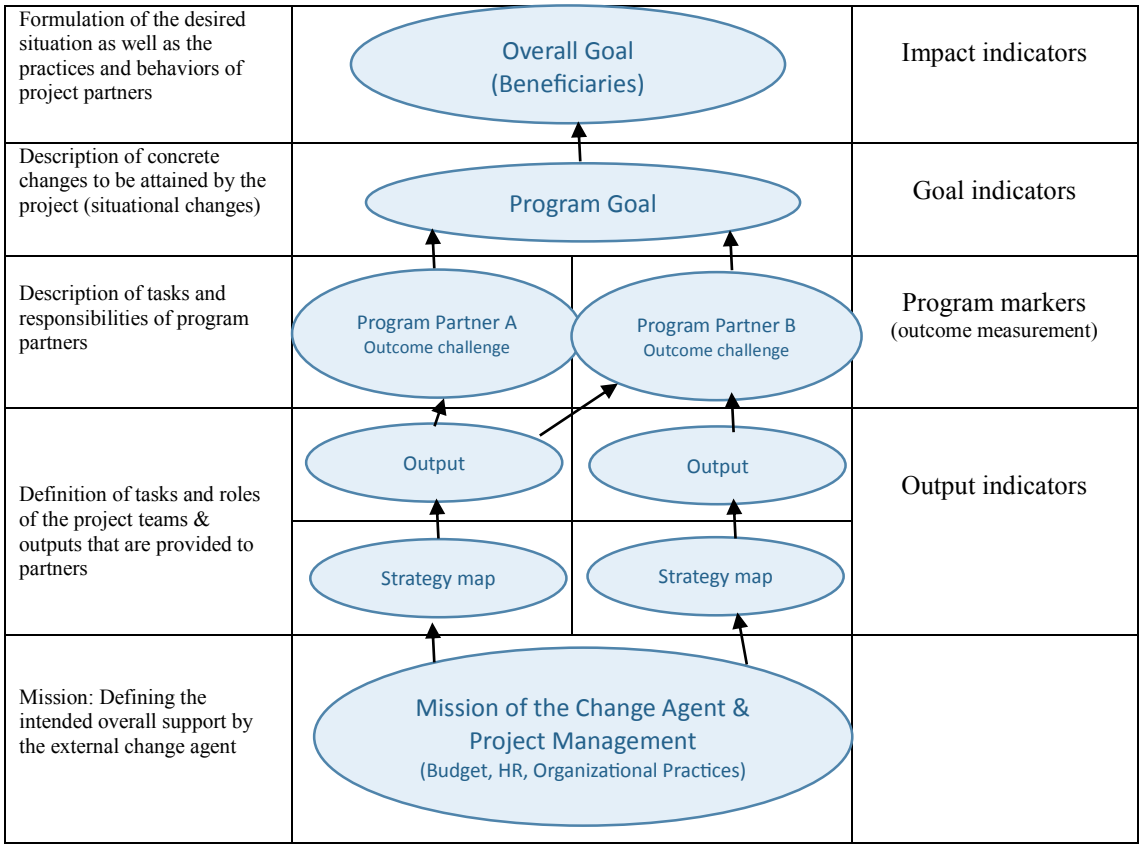


Figure 2.8 Example of the Fusion Model
Adapted from Rogers et.al. in Segone Ed. 2012, p.160,
and Hummelbrunner in Fujita Ed. 2010, p.19.

The main concepts of a Fusion Model are:

- Program goal defined as result of behavior changes of partners.
- Outcome challenges describing tasks, responsibilities and activities of partners.
- Progress markers, qualitative and quantitative indicators defined for each partner for monitoring changes at specific stages or time in their practice and behavior.
- Strategy maps and outputs, with roles and responsibilities. Outputs have a plausible relation to outcome challenges, progress markers verifiable through indicators.
- Mission of external change agent, to define the intended support of partners limited in time and scope.

According to the authors, four cornerstones of the Fusion Model are: Focus on different scales of results (behavioral changes, capacity building); looking for complementarity between the Log-frame Approach and the Outcome Mapping, capacity building since the focus of Outcome Mapping was originally on changes in behavior and capacities of partners and the fusion combining the advantages and strengths of both approaches.

This model should provide added-value between various levels e.g. from local government to family level in the community, when information for partners or different needs and accountabilities are required (adapted from author's levels of Ministries to communities).

2.2.1.4 Empowerment Evaluation

According to Fetterman's (2010) contribution to the webinar series on Monitoring & Evaluation, Empowerment Evaluation is the use of evaluation concepts, techniques, and findings to foster improvement and self-determination. This evaluation is worked by people, participants and staff, taking in charge of their own evaluation with the assistance of an empowerment facilitator (p.278), and it is designed to build feedback loops to help people align what they plan with what they are actually doing in practice.

He wrote that the more people get engaged in this evaluation the more likely they will use the recommendations (Knowledge utilization). Among the key concepts, he mentioned the evidence, the facilitator (critical friend), cycles of reflection and action, community of learners and reflective practitioners (p.281).

Finally he explained three steps: establish the mission, take stock on the current status and plan for the future (p.282). A way of taking stock is a table format by listing the main activities, prioritizing and then rating them from 1 (low) to 10 (high). And with the results he proposed a dialogue among the participants and a planning table for the future.

According to Fetterman the principles of Empowerment Evaluation are: improvement, community ownership, inclusion, democratic participation, social justice, community knowledge, evidence-based strategies, capacity building, organizational learning and accountability (p.279).

The World Bank (WB) gave an important impulse to the strategy of empowerment for improving the wellbeing of poor people with its work on Empowerment and Poverty reduction, which was described in chapter 1 and it is summarized in the following diagram (WB, 2002) complementing the contribution of Fetterman.

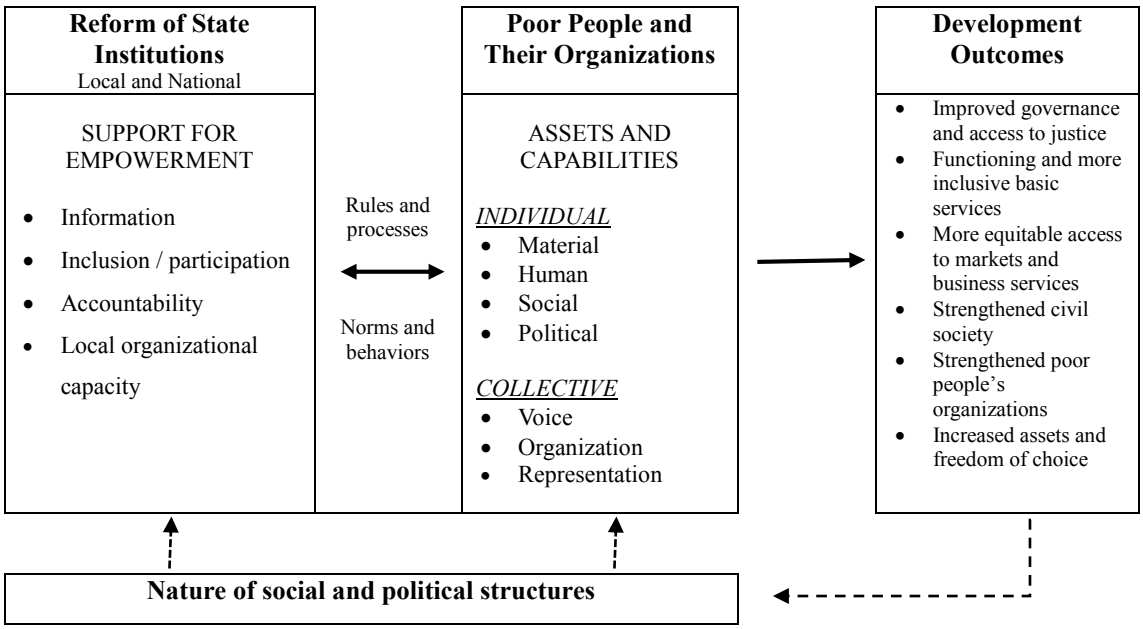


Figure 2.9 Framework for Empowerment
Empowerment and Poverty Reduction. World Bank, 2002.

In summary it is important to see empowerment as an effort for improving the wellbeing of poor communities and authors of their own progress (Rogers, Fetterman, Patton, and WB). A participative monitoring approach as in Figure 2.9 would help communities to get empowered with project participation, information and accountability that the model proposed including their own organization.

2.2.1.5 Real World Evaluation

M. Bamberger and J. Rugh presented in the series of webinars: Real World Evaluations. Conducting equity-focused and gender-responsive quality evaluation under constraints, late in 2012. Some of their concepts were:

- Most impact evaluation are not able to use the textbook designs with the pre-test / post-test project and control group comparisons.
- Most assessments of impact are based on methodologically weak designs.
- Many claims about project impacts are not justified and they trend to a positive bias in many evaluation reports.
- Very few evaluation reports assess the validity of the methodology and findings.

Table 2.2 Analysis of Different Alternatives of Real World Evaluation

Five evaluation strategies and the corresponding designs						
	Methodological strength of the evaluation design					
Evaluation strategy	Strongest	Strong	Sound	Weaker	Weakest	Example
1. True experimental design: *Randomized assignment of subjects and strict control of project setting*	X					Testing a new drug under laboratory conditions
2. Randomized field design: *Randomized assignment of subjects but only limited control over project setting*		X				Using a lottery to select villages to participate in self-help water supply project when demand exceeds supply.
3. Strong non-randomized (quasi-experimental) design) *Pre-and post-test project and control groups*			X			Low-cost housing project where project participants and comparison groups from types of communities where participants previously lived are interviewed at start and end (5 years later) of project.
4. Weaker non-randomized designs: *Baseline or comparison group eliminated*				X		Post-test comparison of communes where rural roads constructed and similar communes without roads
5. Non-experimental designs [only post-test project group]: *No baseline or control group so it is difficult to establish a logically sound counterfactual*					X	Analysis of communities where health centers are operating. There is no baseline survey and no comparison group.

Adapted from Table 2 in page 44 in Bamberger et.al. 2008.

They explained that weak evaluation designs are due to:

- Time and budget constraints,
- Data constraints: non availability (including lack of baseline data) and quality,

- Political constraints: lack of evaluation culture (lack of understanding of the value of evaluation, unwillingness to accept criticism and lack of expertise), Use of information as a political tool.

The last analyses in Table 2.2 illustrated how many different ways of interpreting the real world exist and could be considered to analyze and propose theories of change appropriate for different situations. However, most of them are based on Randomized Control Trials and similar methods, that H. Chen showed were based on a top-down approach with fix static, linear aspects, that not correspond to the Real World Evaluation according to Chen. See also comments of M. Patton on Randomized Control Trials (RCT) in section 2.2.1.1.

H. Chen presented the following comparison between the top-down and bottom-up approaches in his webinar (2016) on Real World Evaluation based on the 2nd edition of his book (2014).

- First Chen found the top-down approach similar to the experimentation evaluation theory. And even though this type of evaluation made important contributions to the field of evaluation, as for example provided concepts, tools, principles to conduct outcome evaluations, enhanced the scientific reputation of evaluation and provided foundation for the evidence-based intervention movement,
- He explained some limitations as for example: such method has impediments for application, e.g. many evaluators cannot apply RCTs or stakeholders object this kind of evaluation as not useful for their practice and it fails to learn from the community. It does not address practical or service issues or he said that an efficacious intervention does not mean the intervention would likely be effective in the real-world.

So, Chen proposed in his presentation the integrated real-world evaluation theory a bottom-up approach for expanding the scope of outcome evaluation, because:

- It balances between scientific principles and stakeholders' interest and practice, making the intervention locally grown.

- Assures innovative intervention's useful for stakeholders, meet scientific and practical needs and stimulates a new way of thinking on intervention design, evaluation (monitoring), dissemination, capacity building, etc.
- Integrates stakeholders' views and practices, thus acknowledging the dynamic nature of an intervention program in a community with scientific principles and methods for enhancing the usefulness of evaluation (monitoring).

Finally, both Chen and Patton stressed the importance for adapting to real world context working with different stakeholders, real time data and opportune decision making with participatory intervention and bottom-up approach, while Bamberger and Rugh suggested in Table 2.2 to try to adequate each project to some kind of Randomized Control Trial. What for Chen and Patton these trials are static closed systems, mechanical cause-effect in simple linear models. P. Rogers and R. Hummelbrunner recommended that the Program Theory should be dynamic and flexible to enable learning and adaptation.

2.2.2 System Thinking: The Critical Systems Heuristics Model and the Outcome Mapping

According to comments of R. Hummelbrunner in the book edited by N. Fujita (2010) there are two main streams today to plan and manage projects: a) Management Based on Results (MBR) and b) Systems Thinking.

The first field was discussed in previous section. Systems thinking is an alternative approach that is based on concepts and uses instruments of systems other than the Log-frame Approach.

B. Williams and M. Reynolds in M. Segone (ed.) (2012) worked on the main concepts of Systematic Thinking and B. Williams and R. Himmelbrunner (2010) argued that systemic approaches could be used to managing interventions with three concepts:

- Inter-Relationships: which are dynamic, non-linear, and sensitive to context and entangled links of simple – complicated – complex inter-relationships.
- Perspectives: help to understand different views of a situation and to explain and predict unanticipated behaviors and give a window into motivation, which generates behaviors.
- Boundaries: which debate four aspects:
  - Purpose/Values/Motivation
  - Resources/Control
  - Knowledge/Expertise (Capacity and capability are bound up with expertise)
  - Legitimacy

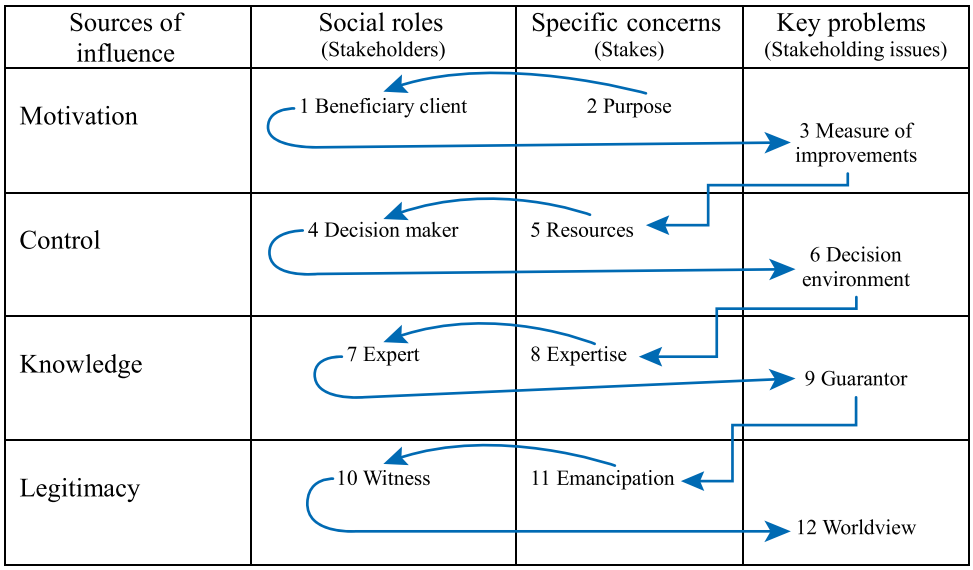


Figure 2.10 Systemic Unfolding of Boundary Judgments
Adapted from Reynolds and Williams in Segone M. (ed.) 2012. p.122.

Figure 2.10 exposed how the concepts of System Thinking were used in the Critical Systems Heuristics model. And Table 2.3 presented twelve questions associated with the four sources of influence: motivation, control, knowledge and legitimacy, which could be used in the analysis for planning a project.

Table 2.3 Summary of Main Questions for Critical Systems Heuristics

Intervention (project, program, policy, etc.) as a reference system (S)	Stakeholders Social Roles	Stakes Role specific concerns (Specific interests and motivations)	Stakeholding issues (key problems)
Who gets what? Sources of **motivation**	Q1. Beneficiaries Who ought to be the intended beneficiary of the system (S)?	Q2. Purpose What ought to be the purpose of a System?	Q3. Measure of Success What ought to be the measure of improvement of a System?
Who owns what? Sources of **control**	Q4. Decision maker Who ought to be in command of resources to enable success of System?	Q5. Resources What conditions of success ought to be under control of a System?	Q6. Decision environment (accountability) What conditions of success ought to be outside the control of the decision maker?
Who does what? Sources of **knowledge**	Q7. Experts Who ought to provide relevant knowledge and skills for a System?	Q8. Expertise What ought to constitute relevant knowledge and skills supporting a System?	Q9. Guarantor What ought to be regarded as assurances of successful implementation?
Who gets affected by what some people get? Sources of **legitimacy**	Q10. Witness Who ought to represent the interests of those negatively affected but not involved with a System?	Q11. Emancipation What ought to be opportunities for the interests of those negatively affected to have expression?	Q12. Worldviews What space ought to be available for reconciling different views regarding a System among those involves and affected?

Adapted from Reynolds and Williams. 2012. pp.126-128

Williams and Hummelbrunner (2010) discussed the Outcome Mapping (OM) as an iterative approach to planning, monitoring and evaluation of social change initiatives. It shifted away from assessing the impact of a program and went toward desired changes of program teams in behaviors, relationships, actions of people, groups and organizations. It is not based on linear cause-effect and rather recognizes the importance of perspectives, that is, actors operate within different logic and responsibility systems.

This method was developed as a response to the limitations of result based management frameworks because of its narrow focus on planning monitoring and evaluation that hindered innovative approaches, learning and flexibility – a strong marker for failure in complex situations (Williams et.al., 2010).

A focus on partners' behavior emphasized the need to effectively devolve power and be responsible to endogenous actors as a condition for success. This mapping recognized that the program contributed to partners' change and learn how it has improved its works encouraging transformation and move of partners in the desired direction.

Four guiding principles underpin the Outcome Mapping framework:

- Actor-centered development and behavior change, outcome mapping recognizes that people and organizations drive change processes, so indicators of success are defined in terms of changes in the behavior of these actors.
- Continuous learning and flexibility, so most effective activities of planning, monitoring and evaluation are cyclical, iterative, and reflexive. They aim to foster learning about the actors, contexts, and challenges for social change.
- Participation and accountability, participation incorporates valuable perspectives and nurture two-way accountability.
- Nonlinearity and contribution, with outcome mapping processes of transformation and change are owned collectively and they result of a complex web of interactions between different actors, forces and trends.

The authors suggested three stages and twelve steps for Outcome Mapping:

- Stage 1: Intentional design establishes consensus on macro level changes with 7 steps: vision-mission-boundary partners-outcome challenge-progress markers-strategy maps-organizational practices.
- Stage 2: outcome and performance monitoring with 4 steps: monitoring priorities-outcome journal (for each boundary partner)-strategy journal-performance journal (should be used as learning tool).
- Stage 3: evaluation planning with one step of an evaluation plan.

Among the lessons of the case application of Outcome Mapping discussed by the authors is that the partner justified its fitting alongside a log-frame to satisfy the need to report and the desire to build learning into its programs. They also explained that the support of intermediary actors became an important focus of the program for learning processes instead of measuring the impact on the end beneficiaries only.

2.3 Late Advances of International Organizations on Monitoring & Evaluation

2.3.1 New Approaches of Agencies of the United Nations

The UN common understanding of a Human Rights Based Assessment (HRBA) published by UN Habitat (2014) recommends that, "Programs should monitor and evaluate both outcomes and processes guided by human rights standards and principles" (p.1). However, most current development practices are usually focusing on the monitoring of desirable outcomes only, and seldom pay any significant attention to the quality of the processes. The equal attention to monitoring both outcomes and process is a fundamental premise in human rights monitoring.

Monitoring and Evaluation (M&E) of activities are also essential for tracking whether activities are being carried out as planned and whether they have the anticipated impact. A coherent and coordinated M&E system can ensure (p.1) that:

- Relevant, timely and accurate data are available for informed decision making;
- Selected quality data is reported to national program leaders; and
- National programs meet donor and international reporting requirements.

The document states also that HRBA has two major objectives: 1) to help identify, on an ongoing basis, the areas on which duty-bearers may need to concentrate, or to which it may need to redirect its attention if its targets for the realization of human rights are to be attained in the most expeditious and effective manner; and 2) to enable a right-holder to hold the duty-bearer accountable for its failure to discharge its duties (p.1).

The UN-Habitat document provided important criteria for monitoring indicators (p.2):

• Reliability: Different users at the same or at different times should get the same result.

• Validity: The indicator should measure what it intends to measure.

• Consistency: The indicator should be consistent over time.

• Possibility to disaggregate: It should be possible to disaggregate the data according to, e.g. sex, ethnic group, geographic area and income group.

• Policy relevance: The indicator should measure issues that can be influenced, directly or indirectly, by policy action.

• Affordability: The indicator should be sustainably affordable.

• Realistic: The indicator should be based on data that is available and accessible.

Accountability (p.2) is an important human rights principle that depends on, but goes beyond monitoring. An accountability mechanism provides claim (right)-holders with information to judge how well duty-bearers meet their duties in relation to a specific right. Duty-bearers, however, cannot be held accountable if they lack capacity to act.

Therefore a comprehensive Monitoring & Evaluation plan sensitive to human rights concerns addresses:

- Results and indicators,
- Processes (development, monitoring and reporting),
- Evidence that vulnerable groups are involved in program implementation and benefit equally from program results,
- Assurance that intended beneficiaries participate freely in monitoring and reporting processes,
- Guarantee that both duty-bearers and claim-holders are addressed.

The United Nations Children´s Fund (UNICEF) has prepared with the consulting EvalPartners and with support of the Claremont Graduate University and the Rockefeller Foundations three webinar on:

- Equity-focused Evaluations from September 2012 until January 2013,
- National Evaluation Capacity Development for Country-led M&E Systems held from January till March 2013 and
- Emerging Practices in Development Evaluations held from March till May 2013.

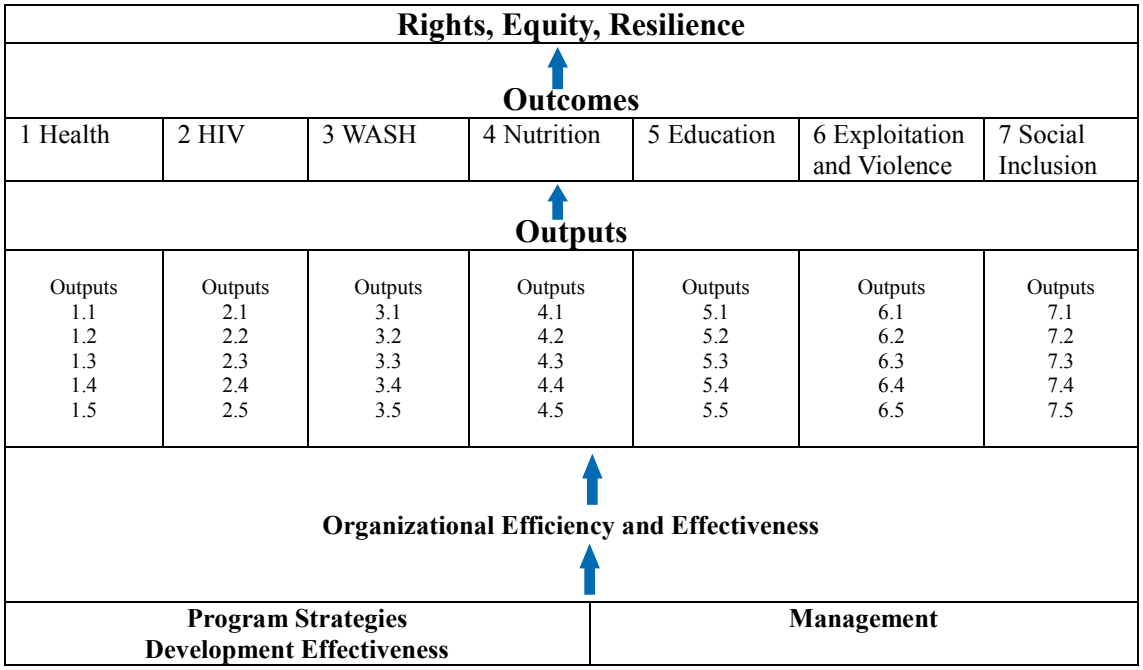


Figure 2.11 Example of a Theory of Change for Children' Rights.
Adapted from UNICEF Monitoring & Evaluation webinar series 2012

The Figures 2.11 and 2.12 exposed an example of theories of changes designed for the main sectors attended by UNICEF similar to those explained by the authors of the webinars, and a summary of the main elements of MoRES[5] developed by the agency for planning, monitoring and evaluation of its sectors in the 5-year national programs.

- MoRES reiterates the use of data and evidence in advocacy and programing,
- Addresses the importance to distinguish between routine monitoring of inputs/outputs and the monitoring of high outcomes / impacts every 3-5 years,
- Uses bottleneck and barrier analysis within the determinant framework.

[5] MoRES stands for Monitoring Results for Equity Systems.

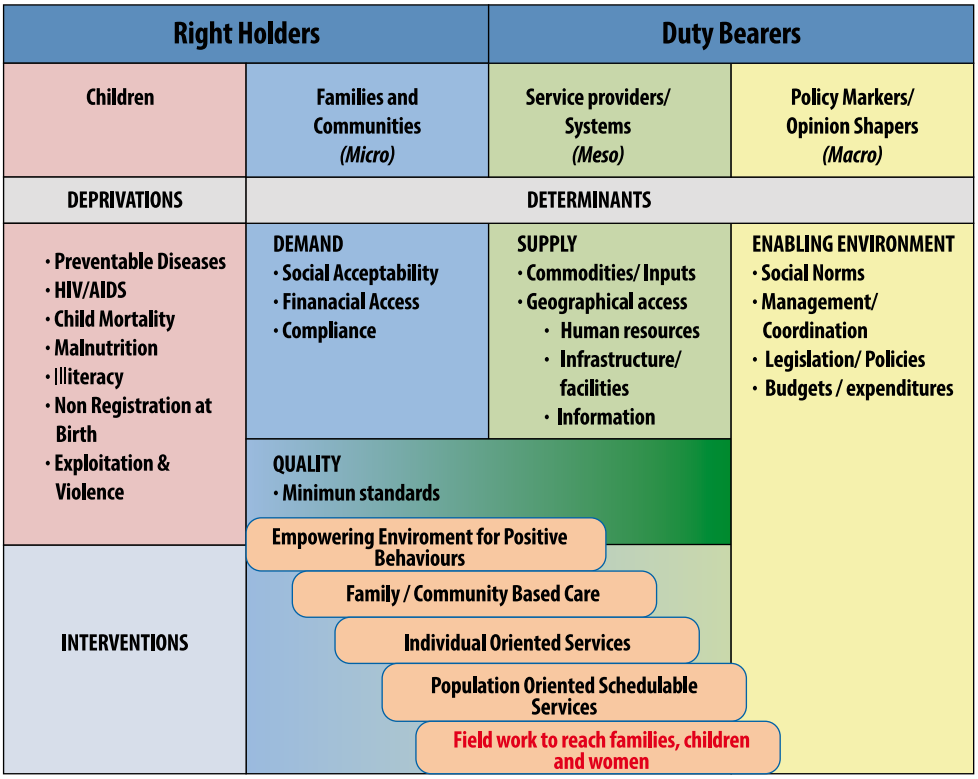


Figure 2.12 Reasons and Determinant Framework
of Monitoring Results for Equity Systems
Adapted from UNICEF webinar series, 2012.

Another system facilitated in 2010 by the UNICEF team was the Humanitarian Performance Monitoring HPM (called also MoRES in Emergencies). It was designed to improve the interventions of UNICEF surge teams in large emergencies around the world. The next figure shows the main elements of Humanitarian Performance Monitoring, which served to train a global cluster of monitoring officers in 2011.

Finally, UNICEF developed also a system for Early Warning – Early Action on the web to support the preparation for large emergencies in each country. The system had three main elements, one for warning possible large emergencies in a period of three and nine months, and sudden emergencies as well. The second element had twenty Key Action formats for the different programs and operation areas to synthetized the preparation actions with their counterparts and the third element was a summary of activities to be implemented in a period of one year. This system had to be updated every six months or at least every year according to the frequency of large emergencies in the countries.

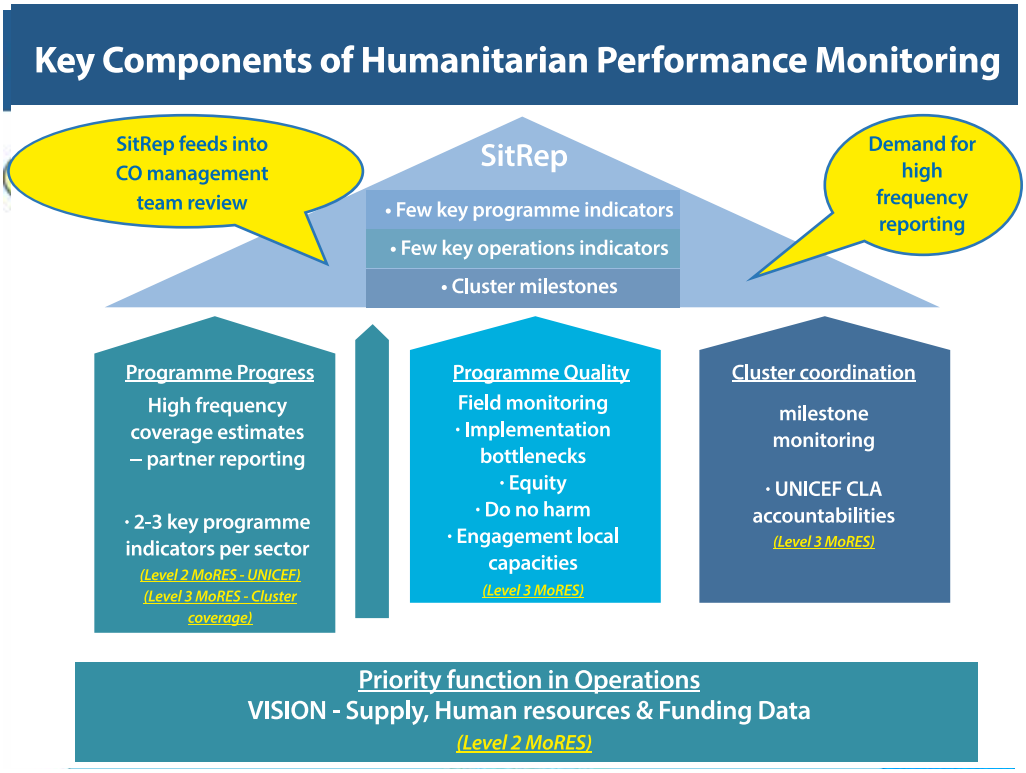


Figure 2.13 Key Components of the Humanitarian Performance Monitoring
UNICEF training webinar for the Global cluster, 2011.

In the second semester of year 2013, the participants had the chance to take again a 4th series of 10 sessions from those most important webinars on Development Evaluation. The main webinars of interest were:

- M. Q. Patton: How to evaluate equity-focused and gender-responsive interventions in complex dynamic environments.
- P. Rogers and R. Hummelbrunner: Program theories and Log-Frames to evaluate pro-poor and equity programs.
- M. Q. Patton: Developmental Evaluation for equity-focused and gender-responsive evaluations.
- B. Williams and M. Reynolds: System thinking for equity-focused evaluations
- M. Q. Patton: Utilization-focused evaluation for equity-focused and gender-responsive evaluations.
- J. Rugh and M. Bamberger: Real World Evaluation. Conducting equity-focused and gender-responsive quality evaluation under constraints.

- D. Fetterman: Empowerment evaluation for equity-focused and gender-responsive evaluations.
- M. Segone: Country-led Monitoring & Evaluatin Systems. Why, What and How.
- J. Z. Kusek and R. Rist: Ten Steps to a Results-Based M&E System.
- M. Q. Patton: Future Trends in Evaluation.

This last list was a synthesis of the e-courses that were most interesting for the purpose of this dissertation.

The next table summarizes the main contributions of the authors.

Table 2.4 Summary of Contributions on Monitoring & Evaluation

Author and Method	Main Concept	Discussion
M. Q. Patton. Developmental Evaluation (DE)	Ongoing learning	Self-organizing and emergent behaviors based on information processing generate learning, evolution and development (p.105) Support learning to inform action that makes a difference, this means changing systems, learning to a deeper understanding of what is happening in a system (p.105)
	Social innovation	Innovation can take the form of new projects, programs, products, organizational changes, policy reforms
	Adaptive management	Guide adaptation to emergent and dynamic realities in complex environments Imposed SMART objectives prematurely can in fact do harm by limiting responsiveness and adaptability (p.103)
	Increased effectiveness	This process includes gathering real-time data to inform ongoing decision making and adaptation (p.105) Intervention and evaluation are dynamic and adaptive (p.109). This stands in stark contrast to impact evaluation that uses randomized controlled trials (RCT) because this conceptualizes interventions as occurring in a closed systems as static and mechanical cause-effect in a simple linear model (p.109)
	Complex systems	Considered a complex system as a large number of interacting and interdependent elements in which there is no central control (p.102)
		Non-linear when small actions can end in large effects, dynamic, where the process is continually changing and complex where several stakeholders should participate in the decision making process
	Accountability	Traditional approach focused on and directed to external authorities and funders, whether resources were used as planned and whether targeted outcomes were attained. This is a static and mechanical approach to accountability (p.110) It places the emphasis on understanding, supporting, and documenting adaptations and their implications. Development occurs in dynamic contexts where even good plans will have to be adapted to changing realities (p.111)
	Learning	Making changes to improve immediate outcomes is single-loop learning; Making changes to the system dynamics (underlying relationships and functioning) to prevent the problem or embed the solution in a changed system, involves double-loop learning. Triple-loop learning involves learning how to learn, and is embedded in the processes of DE (p.106)
P. Rogers and R. Hummelbrunner:	Fusion Model (FM) (LFA + OM)	It searches to integrate the results-oriented focus of LF with OM's process-oriented learning pathways (p.159) FM requires: program goal, outcome challenge, progress markers, strategy maps and outputs. 4 cornerstones: focus on different scales of results (behavioral changes, capacity building), look for complementarity between LFA and OM, capacity building, capacities of partners.
	Log-frame Approach critiques	• Supposed lineal trajectory defined by indicators • Almost inflexible practice for using and managing the LF • Usually donors defining the use and application by counterparts with little participation of stakeholders
	Learning	Knowledge transfer and Knowledge translation (the last adapts to new situations p.167). PT should be up-dated, if not it is fixed and thus prevent learning and adaptation for future work. It provides added-value between different levels: local government to family level, or ministerial to local level
	Outcome Mapping (OM)	For interventions involving social change processes or capacity building plays a major role. Focus on one specific type of outcome i.e. changes in behavior of relationships, actions or activities of people, groups and organizations (p.159).
Program Theory (PT) or Theory of Change	4 kinds of PTs	As Results chain, a log-frame, an outcomes hierarchy, and a realist matrix (p.143). In log-frames the column of Assumptions and Risk is often taken the least seriously, filled in the last minute and in rather general terms (p.162). An example of result chain from CIDA began with inputs, which are used to undertake activities, which produce outputs, which lead to intermediate outcome in the short-term, intermediate outcome in the medium term, and ultimate outcome (also called impacts) in the long term.
	SMART indicators	PTs need SMART indicators (p.162) in particular for MBR. In the case of complicated aspects, OVI should enable monitoring of effective practice, relevant factors and context conditions. For complex aspects, OVI should allow for documenting initial conditions and (in combination with assumptions) capture emerging phenomena (p. 163). The time dimension of OVI shows: leading – coincident – lagging indicators (two, first for monitoring and last for evaluation)

	Developing Program Theory	• Understand how change comes about • Understand program and its environment • Involve different stakeholders • Change it as needed
	Representing PT	• Choose appropriate format and incorporate assumptions • Capture different perspectives
	Using PT	• Develop indicators appropriately • Disaggregate data • Support knowledge translation • Adapt the program theory as needed
	Project design and implementing	Every project is within a unique setting or context that includes local and regional economic, political, institutional and environmental factors as well socio-cultural characteristics of the communities or groups affected by the project.
PT pro poor	Empowerment	People are agents of their own development, therefore are main stakeholders among others.
	Systems	Complex dynamic and non-linear because of participation of several stakeholders. PT usually consider complicated and complex contexts. And realist matrices identify and understand differential impacts across different types of participant and context identifying "what works for whom under which conditions" (p.153) similar to the questions of CSH.
	Non-linear	Use Feedback mechanisms, best illustrated by Causal Loop Diagrams (positive "reinforcing", negative "balancing")
	Learning	Cycles can be considered (through feedback and causal loops diagrams) (p.146) Outcome Mapping is a suitable way to articulate underlying PT w. focus on one specific outcome (p.159)
		PTs should be dynamic and flexible to enable learning and adaptation. (e.g. FM). Not up-dated PT tend to be fixed and thus prevent learning and adaptation (p.167).
		Acknowledging that not everything can be anticipated is an important ingredient for staying attuned to reality (p.168). During monitoring specific attention should be paid to capture unexpected and unplanned effects.
B. Williams and M. Reynolds (2012) Systems Thinking or Thinking Systematically B. Williams and Hummelbrunner (2010)		Systemic approaches can be understood as the confluence of three concepts:
	Critical Systems Heuristics	Inter-relationships – perspectives – boundaries, Within the four aspects of: Purpose-values-motivation, Resources /control, Knowledge/expertise and Legitimacy. They disaggregated these aspects on Social roles (stakeholders), Specific concerns (stakes) and Key problems (stakeholding issues) (Figure 2.10 and Table 2.3)
	Outcome Mapping (OM) (initiated by CIDA)	OM is an iterative approach to planning, monitoring and evaluating social change initiatives. It shifts away from assessing the impact of a program, and toward changes in the behaviors, relationships, actions of people, groups and organizations. It is not based on linear cause-effect. Four guiding principles: Actor-centered development and behavior change – Continuous learning and flexibility emphasizing effective PML are cyclical, iterative and reflexive – Participation and accountability – Nonlinearity and contributions.
		1. Stage: Intentional design establishes consensus on macro level changes with 7 steps: vision-mission-boundary partners-outcome challenge-progress markers-strategy maps-organizational practices. 2. Stage: outcome and performance monitoring with 4 steps: monitoring priorities-outcome journal (for each boundary partner)-strategy journal-performance journal (should be used as learning tool) 3. Stage: evaluation planning with one step of an evaluation plan.
M. Bamberger, J. Rugh	RWE	Despite the several reasons for deficient impact evaluations authors wrote that time and budget constraints cannot be excuse for a sloppy evaluation methodology
		Most of their alternatives are based on RCT (randomized control trials)
H. T. Chen: Integrated Real-World Evaluation theory	RCT	Are top-down approach is similar to experimentation evaluation theory, which contributed w. concepts, tools, principles to conduct outcome evaluations, enhanced scientific reputation of evaluation and found evidence-based interventions
	Limitations	Evaluators have impediments for application of RCTs or stakeholders complain that this is not useful for practice and fails to learn from community.
	Bottom-up approach	Balances scientific principles and stakeholders' interest and practice making intervention locally grown. Innovative intervention useful to stakeholders, meet scientific and practical needs Integrates stakeholders' views and practices, acknowledging the dynamic nature of community program w. scientific principles and methods enhancing the usefulness of evaluation (thus monitoring)
Patton and Chen	Summary on RCTs	Static closed systems, mechanical cause-effect in simple linear models

D. Fetterman: Empowerment Evaluation	EE	Use of concepts, techniques, and findings to foster improvement and self-determination EE is worked by people, participants and staff assisted by a facilitator (p.278) Key concepts: evidence, facilitator, cycles of reflection and action, community of learners and reflective practitioners (p.281)
	3 Steps for EE	Establish the mission, take stock on the current status and plan for the future (p.282)
	10 Principles	Improvement, community ownership, inclusion, democratic participation, social justice, community knowledge, evidence-based strategies, capacity building, organizational learning and accountability (p.279)
WB Empowerment and Poverty Reduction	Support for Empowerment	An alternative for improving the wellbeing of poor communities as authors of their own progress. Participation, information, accountability and local organizational capacity. WB 2002
	Assets and capabilities	Individual: material, human, social and political Collective: voice, organization, representation
	Development outcomes	Improved governance and access to justice; Functioning and more inclusive basic services; More equitable access to markets and business services; Strengthened civil society; Strengthened poor people's organization, Increased assets and freedom of choice
Kusek et. al. Ten steps to a Results Based M&E Syst.	participation	Emphasizes the importance of participation (p.58)
	Indicators	CREAM criteria: Clear, Relevant, Economic, Adequate and Monitorable (p.68)
	Results based Monitoring	Goes beyond process indicators, up to expected results according to certain periods (usually medium and long term) and levels of achievement (usually outcome (medium term) and specific objective (long term outcome) in a LF (p.99)
	Analysis and Reporting	Frequent and continuous information provide clues to problems and create opportunities to improve strategy. Analyzing and reporting performance findings is a critical step, determines what, when and to whom it is reported. The comparison over time is critical.
	Form of reporting	Diagram based on frequent monitoring data helps to examine changes over time, to look for trends, directions. The more data points the more compelling the trends The suggested table on Outcomes Reporting Forma (p.133): List of Outcome OVI, Baseline, Current, Target, Difference (all in %).
	Feedback, knowledge, learning (p.138)	Using findings to improve performance is the main purpose of building a results-based M&E system (p.138). Findings can be used for accountability, allocation of resources, performance problem correction, motivate personnel M&E system constitute a powerful tool for decision makers to demonstrate QAT (p.140) (Q for good performance)
		M&E systems provide important feedback about the progress, the success or failure, of projects, programs, and policies throughout their respective cycles p.140
		Feedback is the process of ensuring that lessons learned are incorporated into new operations (OECED 2001, p.60) The use of M&E findings can promote knowledge and learning in government and organizations. Learning has been described as a continuous dynamic process of investigation where the key elements are experience, knowledge, access and relevance. (p.140) Learning must be incorporated into the overall programming cycle through an effective feedback system (p.143).
SIDA (2007) (similar CIDA – JICA – NORAD - etc.)	M vs. E	M is continuous or periodic, and focused on intended results and quantitative methods, while E is episodic, ad hoc (usually at the end of a project) and focus on intended and unintended results and uses qualitative and quantitative methods (p.13, Box 1).
	M&E	Serve to accountability and learning (p.14) responding to performance that concerns to results.
	learning	Its real importance lies in the translation of new knowledge into better practice (p.15) Evaluation for learning is formative E, and for accountability is summative E.
	participation	Participation empowers community, project staff and participants in a collaborative continuous and iterative process of data collection and analysis with simple qualitative and quantitative methods (p.20) and it is self-education in democratic governance.
GIZ by R. Hummelbrunner (2010)		ZOPP (of GIZ) included participation of stakeholders through workshops using metaplan technique (p.24) GIZ improved ZOPP into PCM including cross-cultural work and other issues like quality and effectiveness, later they launched Capacity WORKS which responded to agree on objectives and results-chains jointly with partners. Later put stronger focus on development results (quality at exit)
		According to the author LFA is still included in these methods as a middle path (p.31) as component of results base management and also for intense stakeholder participation (at least in planning stage).

Adapted from different authors.

2.3.2 Other Advances at Personal Level

As a result of those ten years (1996-2005) implementing participative Water-Sanitation-Hygiene projects, the project team advanced in the understanding that the Log-frame Approach was dynamic and non-linear. So, the Plan for Quality-Accountability-Transparency (QAT-Plan) and the Systematization Curve were published in 2005.

These tools described the way how the participative field teams summarized the advances of the indicators of the project in the practice with communities on changing behaviors in hygiene, accountability, and education. The first large application of these tools was published at Lund University in Sweden in 2008.

The local governments in developing countries had attained a remarkable importance for a decentralized planning and implementation of projects with communities in their regions in the past century. So it was also important for them to improve their planning, Monitoring & Evaluation, systematization and learning process.

According to the experts, a criteria for working with a bottom-up strategy based on Quality, Accountability and Transparency was necessary for the participation of project field teams, local leaders and authorities, donors and participants. The QAT-Plan responded well with the criteria and the theory of change with elements of Log-frame Approach and the Outcome Mapping.

The next diagram showed that along this challenge any new proposed method could also consider the criteria of Quality, Accountability and Transparency besides Participation, Empowerment and Governance, what was recommended by different authors.

The graphic tried to respond an important question of UNICEF programmatic areas how communities would reach a resilient and sustainable development within the new paradigm of complex, non-linear, dynamic context aggravated with increasing number and magnitude of disasters.

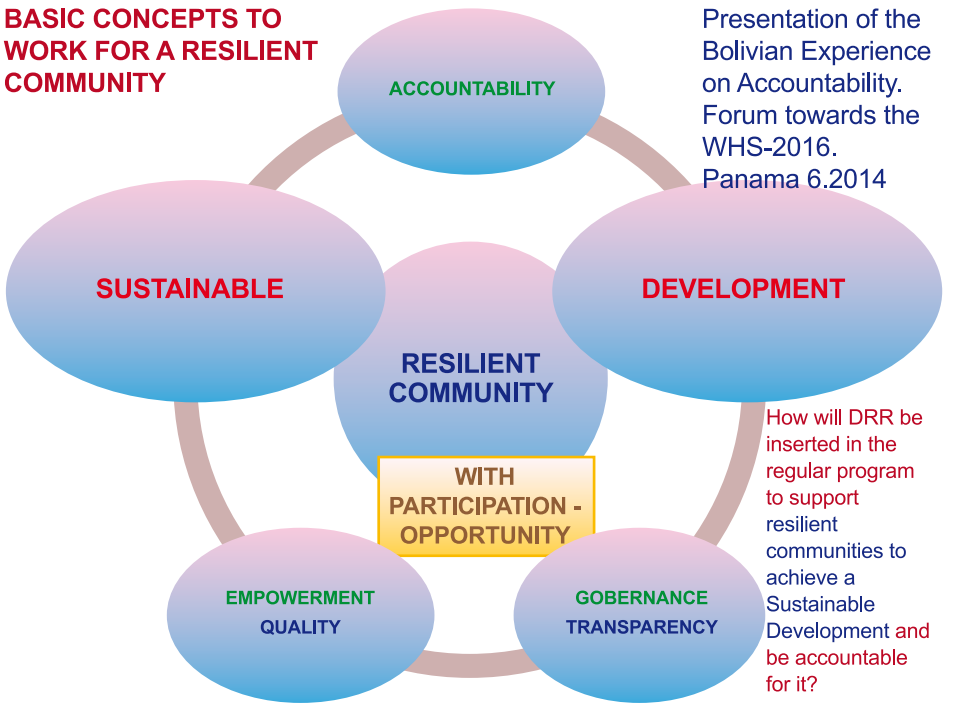


Figure 2.14 New Approach for Resilient Communities within the Paradigm 2030
Workshop on Accountability in Panama 16.06 and UNICEF meeting 30.06. 2014. Guachalla.

Probably a good response was with participation, empowerment and governance of the communities, their leaders, authorities and local governments and the criteria of quality, accountability and transparency in their programing, as several authors have argued.

As a result of this process it is pursued in this document to strengthening local technical teams in a participative planning, monitoring, systematizing and learning approach. Therefore, an expected result is for them to reach the participation of the stakeholders at local level like community leaders, professionals and Non-profits, as well as financial intermediary Agencies, whose partners or counterparts reach the municipalities and communities where the target population of children, women and families live.

2.4 Conclusions and Lessons Learnt

This second chapter described two clear moments with progressing approaches for planning, monitoring and learning in the field of development projects. The first moment covered the period of the beginning of the Millennium Goals, when most of

international organizations were working with an approach based on the Log-frame, since the last part of the 80´s and 90´s with an important improvement towards the Management Based on Results especially supported by the Declaration of Paris in 2005.

The second period was marked by the findings of the assessments of the Millennium Development Goals around 2013, when the UN announces that despite all large improvements achieved around the globe, there was still an Unfinished Agenda with the worst off groups who were below the national averages having left behind women, girls and indigenous people mainly in rural areas and poor zones of large cities of developing countries.

Between the two moments many international organizations started working on participative approaches to insert several local and national stakeholders in particular the beneficiary communities for achieving better results in new programs. However, their participation should be focused on learning for better outcome processes and decision making within a complex, dynamic and non-linear context as the World Bank recommended on empowering communities.

After the United Nations (UN) Human Rights Based Assessment, agencies like UN-Habitat and UNICEF initiated approaches like Monitoring Results for Equity Systems and the Humanitarian Performance Monitoring for tackling the new challenges with the expectation to achieve the participation of duty bearers and right holders in a context of good governance and empowerment of participants.

According to leading experts there were two clear fields within the new paradigm 2030 for planning, monitoring and evaluation of development projects, one based on the Log-frame Approach, which is still essential for good Planning, Monitoring & Evaluation even more with the positive critics for necessary improvement.

The other method suggested by authors like Williams, Reynolds, Rogers, and Hummelbrunner is Systems Thinking, which is based on the analysis of Interrelationships, Perspectives and Boundaries, with aspects of Motivation, Control, Knowledge and Legitimacy.

Several authors like J. Z. Kusek, M.Q. Patton, P. Rogers emphasized the importance of the process of learning with the steps of feedback and knowledge gathering for better practice maintaining dynamic and flexible programs of theory or theory of changes to enable learning, innovation and adaptation.

Planners should be aware that Log-frame Approach (LFA); even though, facilitates the participation of several stakeholders, it does not perceive the emergent and changing elements of a complex context.

Some authors (Rogers, Hummelbrunner, Williams) have suggested a good solution to this situation to merge the Outcome Mapping method that involve capacity building processes for behavior changes with the results-oriented LFA into a Fusion Model.

Other innovative methods like the Developmental Evaluation from Patton emphasized the participation of the stakeholders in a continuous approach combining bottom-up strategy with support of top-down policies. In all these approaches the empowerment and good governance of the participant communities were important elements emphasized by the World Bank, P. Rogers and D. Fetterman.

The process of participative learning requires attention and a clear path from the planning stage thru the monitoring of the implementation to the conversion of the information in knowledge to be used and translated into new projects for better results.

The Fusion model should also consider other emergent and dynamic elements with a feedback and loop analysis and get help of the criteria of Systems Thinking on perspectives and boundaries of stakeholders.

In the next chapter the method for Project Planning, Monitoring, Systematizing and Learning is explained, how it fits within the Fusion Model and the tools and components of the method to be used in the practice are described in detail. The chapter also aimed the purpose of capacity building to transfer the method to local technical teams of Non-Governmental Organizations and local governments for future improvements at local levels.

Chapter 3 Research Theory and Methodology: The Project Planning, Monitoring, Systematizing and Learning Method

The practice with project field teams and community leaders, schools and municipal staff in developing programs was explained in the two preceding chapters, showing appropriate tools for monitoring and learning to improve projects' results.

The paradigm of the Sustainable Goals 2030 was discussed with new challenges of complexity, non-linearity and dynamics in developing countries worsen by the increase of the number and impact of disasters testing developers to keep learning and to integrate the participation of stakeholders in monitoring within a bottom up approach.

Several authors of the field of Monitoring & Evaluation have proposed alternative solutions for planning, monitoring and learning in dynamic, complex and non-linear development contexts, e.g. the Fusion Model of the results oriented Log-frame Approach and the process-oriented - learning pathway of the Outcome Mapping.

This third chapter refers to the components of the proposed method for Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method). The tools of the method are explained: the Project Cycle and its stages, plus the transformation of the Log-frame Approach into a Plan of Quality-Accountability-Transparency criteria, called QAT-Plan, supported with an Outcome Mapping named LF-Tree plus the Curves of Systematization for better analysis, opportune feedback and appropriate reporting.

The chapter shows also that the PlaMSyL method fits well with the requirements and cornerstones of a simple Fusion Model and the use of two sets of databases, the first with five static databases in the planning phase, and then three calculated dynamic databases for field monitoring supporting Local Technical Teams to learn in a hands-on practice with communities and a third stage for the executive reporting.

3.1 Evolution of the Method and its Main Elements

3.1.1 Project Cycle and Stages for Application of the Method

The Project Cycle was illustrated (Guachalla, 2005) with counterparts and field teams of intermediary agencies and participation of community leaders during the systematization of the monitoring activities, “because people are agents of their own development” (Rogers, Hummelbrunner, 2012) encouraging cycles of reflexion and action, and communities of learners and reflective practitioners (Fetterman, 2010) to reach reciprocal accountability and governance (World Bank, 2002 and 2004 and Rogers et.al. 2012).

The cycle in Figure 3.1 was subdivided in five periods for planning, designing, monitoring while implementing, systematizing and learning (similar to Kusek, 2004):

- The first period of participative planning (steps 1-2) started with the situational analysis, field measures, the determination of the problem, the definition of expected goal and results, plus a strategy to reach them. The participants learnt about the responsibilities and contributions of each group for a successful implementation and coordination for its sustainability. They were also aware about assumptions and possible risks that might occur along the project.
- The second period of adequate design (steps 3-4) included the Log-frame (LF), (later accompanied with the Outcome Mapping LF-Tree), a first version of the Plan for Quality-Accountability-Transparency, the feasibility and sustainability analysis, the timetable and budget plus a monitoring plan and annexes according to the size of the project (e.g. outlines and specifications).
- The third period (step 5) was the appropriate implementation according to the strategy with a constant monitoring of the indicators to measure periodically the advances toward the targets.

Two additional areas were included in the project cycle of Systematization and Learning with communication and dialogue:

PROJECT CYCLE

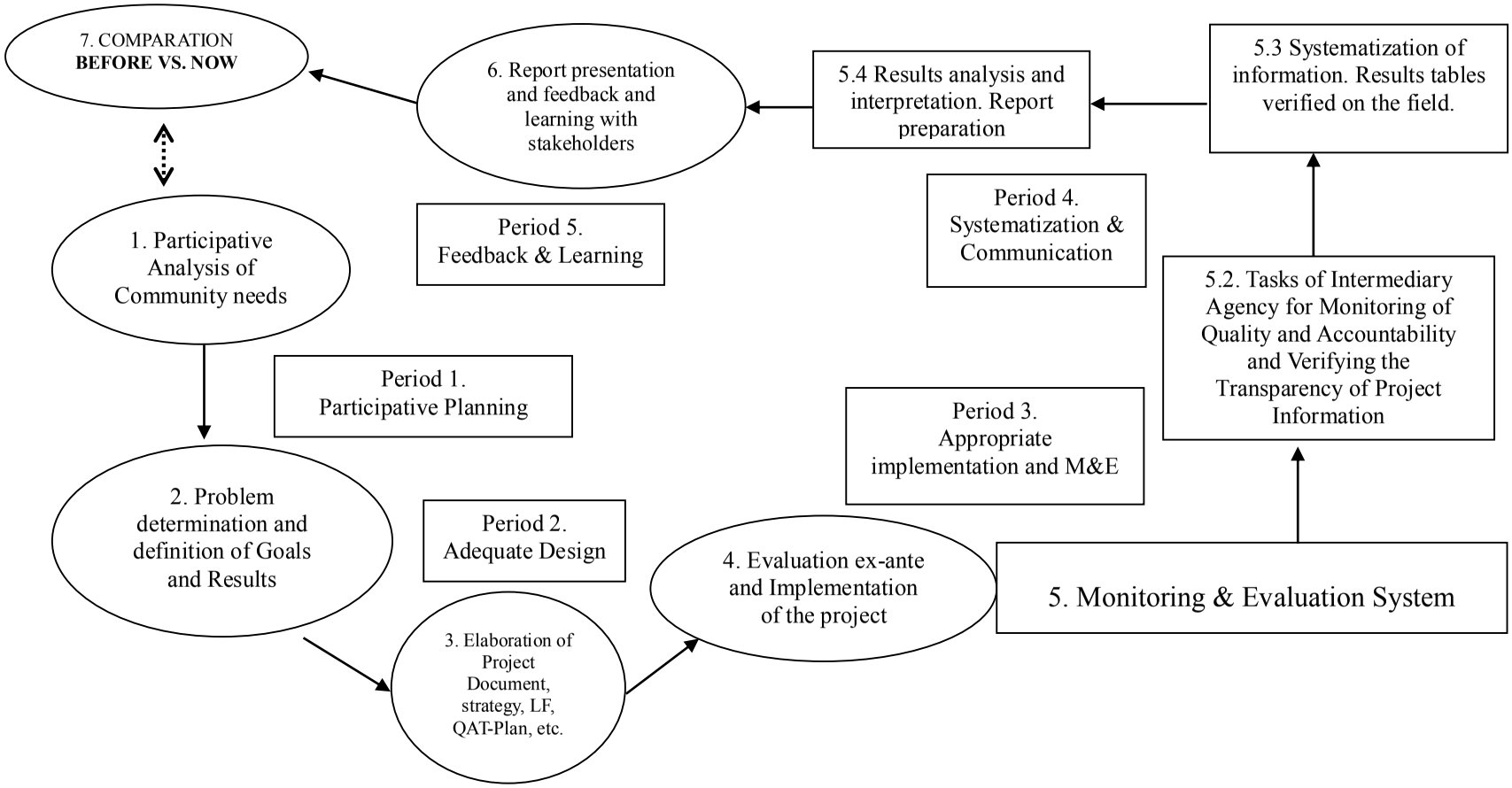


Figure 3.1 Project Cycle
Adapted from Guachalla, 2005 and 2008.

- A fourth period (steps 5.3 and 5.4) for the systematization of the information on the advances of the project (gathered, analyzed and ready for feedback), showing the differences between the desired and the actual outcomes (Patton, 2012 and Kusek, 2004) for the discussion among stakeholders.
  Here it was important to count with appropriate and didactic tools for facilitating the analysis and discussion among stakeholders.
- The fifth an iterative period (step 6) was the time for discussion, analysis, feedback of lessons learnt for generating knowledge comparing the field and planning information. Here; stakeholders, e.g. participant families, leaders, authorities, field team, managers, even the donors would participate, in order to see how the project was improving and what opportune adjustments had to be done.
  This period was conceived as an iterative process according to the frequency of reports and accountability of the different actors building a loop of analysis for adjusting the project to move forward toward the proposed goals or to justify the necessary changes (Patton, Rogers, 2012).

At the end of the project, this period would help to see the gaps between the planned and achieved goal and results, providing a lessons learnt summary as it was recommended by the Swedish Agency, the World Bank and individual authors like Patton and Rogers. Finally, this systematization process would allow improving the planning, design and implementation of new projects. All these phases are well included in the ten steps recommended by Kusek, 2004.

It was necessary to organize the tools according to three stages: the planning, field monitoring and executive monitoring and reporting stages for future applications of the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method).

The next Table explained the practical application of the tools of the method PlaMSyL in three inter-connected stages: the Planning stage with the static data-information, second stage Field Monitoring and third stage of Project Executive Monitoring and Reporting.

Table 3.1 Outline of the Method in Three Stages

PROJECT PLANNING STAGE	FIELD MONITORING STAGE	EXECUTIVE MONITORING AND REPORTING STAGE
		Project Report Document
		Project Curves of systematization
		Table of Results based on QAT-Plan and PlaMSyL Dashboard
	Report 3 Conclusions and Recommendations by Sector Report 2 by Sector and Indicator Report 1 by Site and Indicator	
	Systematization Curves (Sys-Curves)	
	3. Qualification of Indicators	
	2. Calculation of Indicators of Outputs and Outcomes	
	1.Field Data Summary with Questionnaire (and/or Table format) and Strategy	
5. QAT-Plan Management Chart Proposed Qualification Ranges		
4. Personnel Chart for accountability		
3. Timetable		
2. Log-frame (LF) and LF-Tree List of indicators and targets / standards		
1.Geo-population list – map		
PROJECT PLANNING STAGE	**FIELD MONITORING STAGE**	**EXECUTIVE MONITORING AND REPORTING STAGE**

- The information of the first stage of planning was prepared according to the periods 1 and 2 of the project cycle. This stage was executed according to the type of project discussed in the next chapters.
- The second stage of field monitoring was organized fitting the capacity of the project team to monitor the advances in main areas of the project along period 3 of the project cycle. It was implemented in large emergencies as chapter 5 illustrates.
- The third stage compiled the monitoring information from different areas and sources of the project to prepare an executive report to authorities and donors closing the project cycle.

Initially this method has focused on different development and emergency projects. Nevertheless, the tools proposed in the document are useful for other planning and implementation levels like programs and policies as well. These could be inter-connected as next figure suggested.

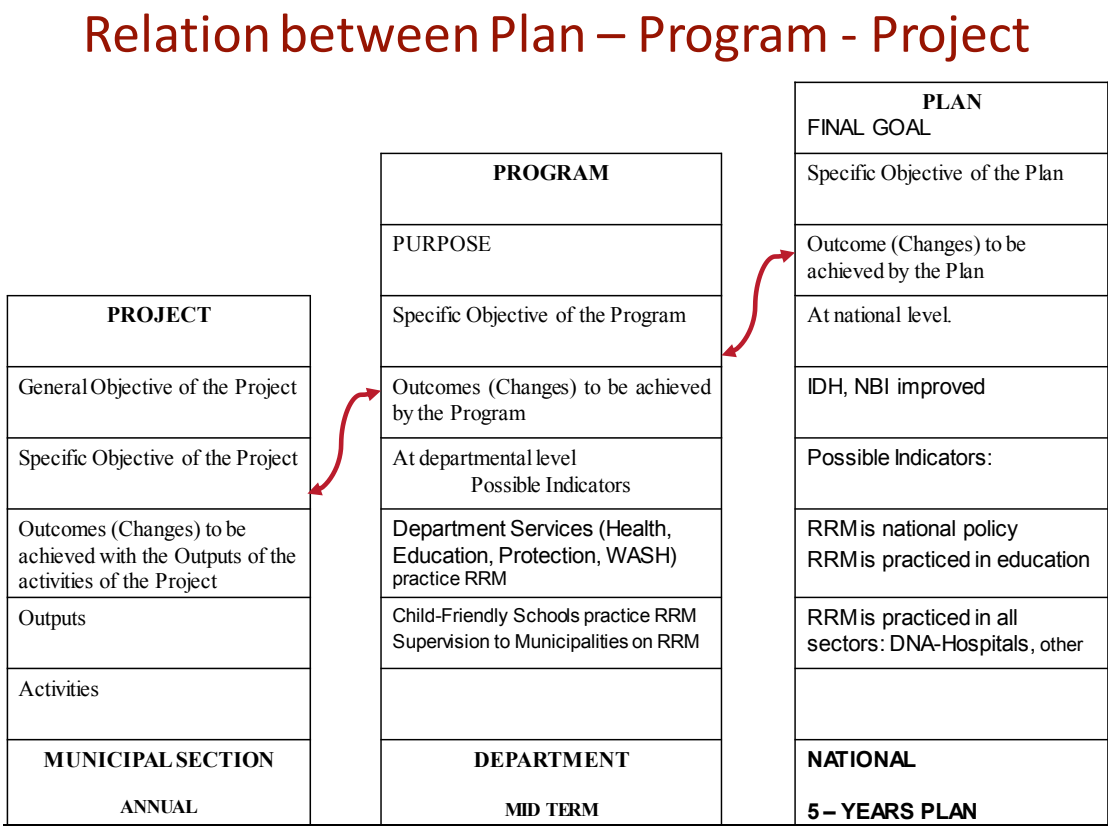


Figure 3.2 Relation between Plan – Program – Project
Adapted from Guachalla, 2008.

3.1.2 Use of the Log-Frame in the Method

The Logical Framework (LF) was explained in the first chapter (Hummelbrunner, 2010) and it was used in the method with a 5 x 5 matrix, where a middle raw included intermediate outcomes to be measure with change indicators.

In summary the matrix of 5 x 5 of Table 3.2 was explained as follows:

- The five levels described in five rows starting at the bottom were: A list of main activities (listed in more detail in a separate time table) and a summary of main resources to deliver the outputs of the 2nd row with the appropriate indicators, means of verification and assumptions. The outcomes in the 3rd row, which yielded under some assumptions the desired specific objective in the fourth row. Usually the 5x5 LF had a fifth row (seen from the bottom up) at the top with a general goal that linked the project to a regional program and a national or strategic plan.
- The first column contained the narrative descriptions of the goals (General and Specific objectives, Intermediate Results, Outputs) and a short list of main Activities; while in the 2nd column were the Specific, Measurable, Achievable, Relevant and Time bound (SMART) targets in numbers and/or percentages (#, %). The third column had the list of Objective Verifiable Indicators (OVI) to assess the advances toward the targets. The 4th column included the means of verification. Finally the 5th column explained the main risks or assumptions.

In this way the Log-frame was better compatible with the Management Based on Results proposed by the World Bank (Kusek, 2004), R. Hummelbrunner (2010), or Molund, (2007).

The last column has been most neglected in past projects, and according to the discussion in Chapters 1 and 2, the monitoring of the issues described in this column would provide rich information of the real context for periodical adjustments by stakeholders (Patton, 2012).

The list of Objective Verifiable Indicators of the 3rd column, which were used to measure the advances toward the targets, were organized as follows:

- Input indicators to measure the use of project resources (Human-Financial-Supplies) for the determination of bottlenecks, to be informed in a weekly internal follow up and a monthly financial report.
- Process indicators to measure the weekly advance of activities according to the project time schedule, used by the field project team and the community counterparts, usually included within the monthly internal report.

Table 3.2 Outline of the Log-Frame

Narrative description of Objective, Results and products	SMART Target (also benchmarks)	Objectively Verifiable Indicators OVI	Means or Source of Verification	Main Assumptions and Risks
General Objective				
Specific Objective	Nº and % to be reach in a period of time and location	Impact indicators	External evaluation report (mid-term and final). Municipal reports. Annual participative internal evaluation report. Other authority report	Political conditions to contribute to national development. Regional conditions for achieving the outcomes and for reaching the goals of the project. Community conditions of participation and local authorities support. Local conditions to execute the programmed activities, e.g. Climate, political situation, opportune financial support.
Outcomes or Intermediate Results	Nº and % to be reached in a period of time and location	Change or outcome indicators	Forms and reports (quarterly) of change advances and achievements Supervision reports (4-6 months) of donor or intermediate organization	
Outputs or Products	Nº and % to be reached in a period of time and location	Output indicators	Output forms and reports (monthly) Monitoring reports by local authority bimonthly.	
List of main Activities →	Process and input indicators (generates the Time table or Schedule)		Follow up of activities and financial reports (weekly, by weekly, monthly).	
	List of inputs: Personnel Equipment Materials ⇨		Costs and budget in detail, descriptive by financial source	
	Economic and financial parameters and indicators			External initial conditions

HDI and UBN mean Human Development Index and Unsatisfied Basic Needs, which are international indicators accepted globally for measuring the development of a society or country.
Adapted from Guachalla, 2005.

- Product or direct results indicators to measure the monthly advance and achievement of Outputs used by the technical and social professional workers with the counterparts at community and municipal level, included in a periodical report (monthly up to quarterly report, according to the donor's request).
- Change indicators to measure the quarterly (or semester) advance towards behavior changes or Outcomes (intermediate results). These were used by the project field coordinator with his/her counterpart at municipal level and reported quarterly or every semester.
- Impact indicators to measure the annual advance toward the Specific Objective. In this case the annual assessment was internal and the final or mid-term evaluation, external.

All these indicators fitted well with the Clear, Relevant, Economic, Adequate and Monitorable (CREAM) criteria proposed by the World Bank study on Monitoring & Evaluation Systems (Kusek, 2004).

3.1.3 Development of the Theory of Change of the Method

3.1.3.1 Initial Strategy for Monitoring and Supervision

The project teams of Catholic Relief Services and Caritas were initially urged to use a monitoring scheme with the elements of the Log-frame, the indicators, targets and the means of verification. A first plan was prepared to follow up activities and supervise results with the field team of Promoters, Social and Technical Responsible and field Coordinator. The team reported internally in a proper frequency the advances of the indicators according to the corresponding levels of accountability in relation to activities, outputs and outcomes.

The monitoring activities of the field team were like a sequential relation (Figure 3.3):

- The Coordinator followed the activities of the technical and social officers, s/he would verified the outputs of that work at the level of the Promoters (Extensionists) at a quarterly basis (or if possible every two months).
- The technical and social officers followed up the activities of the Promoters, the results were verified at the level of the community committees at monthly basis.
- And Promoters followed the activities of the community leaders and committees, the results were verified at the level of families and schools at a weekly basis.

The field team prepared the reports according to the following process:

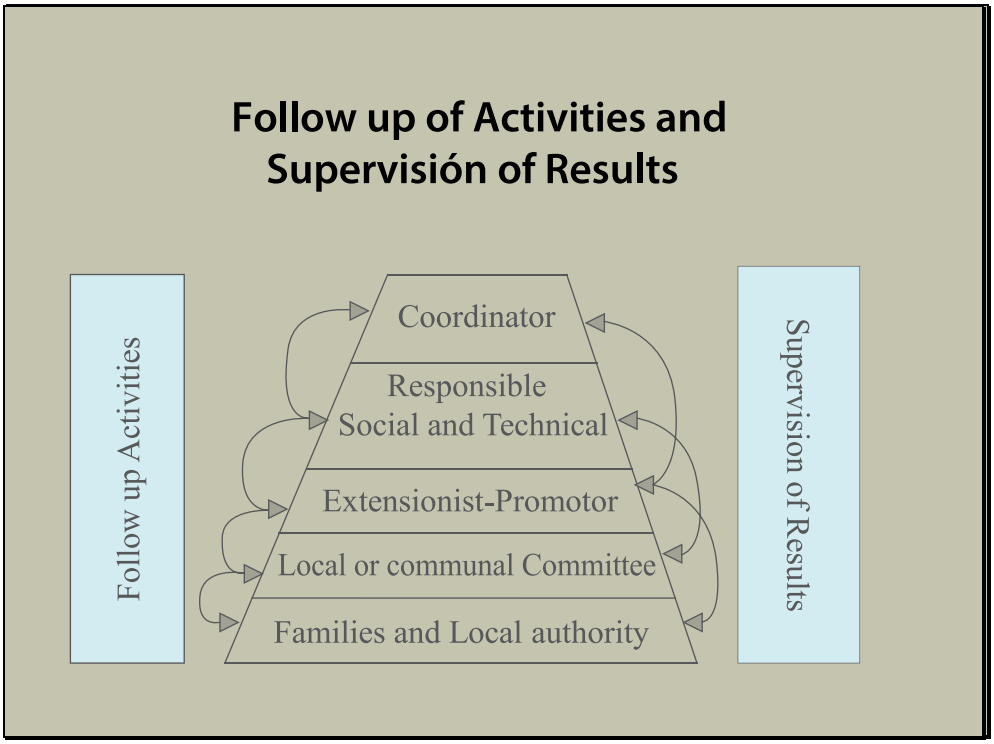


Figure 3.3 First Attempt of Information Flow for Accountability Purposes
Adapted from Guachalla, 2002.

- The Coordinator wrote the report of the advances of outcome indicators toward the targets every quarter (or semester), verifying the advances of outcomes at community and family levels.
- The technical and social professionals prepared the monthly reports on advances of the outputs of the promoters verifying results at community and family levels.
- The field team of promoters wrote their one page process report every week based on the advances of activities at family and community level.

A new approach was needed because this procedure grew far beyond the first scheme proposed in Figure 3.3, in particular to fit with the directresses of the Paris Declaration, the positive critical analysis to the Log-frame Approach, and the recommendations of new theories of change similar to those provided by authors like Patton, Rogers, Williams and Hummelbrunner.

3.1.3.2 The Plan for Quality, Accountability and Transparency

The Figure 3.4 presented a new theory of change called Plan for Quality, Accountability and Transparency (QAT-Plan) that contained the information of the Log-frame disaggregated and reorganized in a new chart (Guachalla, 2005) that matched with the periods of the project's time table, the personnel responsible to monitor and verify the advances of the indicators and provided the information for the Systematization Curve, explained in Section 3.1.4 with criteria of Quality, Accountability and Transparency.

The challenge initially was to have a model that would respond to the requirement of a participative management based on results and then to fit also to the learning process for behavior changes of an Outcome Mapping ending in a Fusion Model according to the description in chapter 2.2.1.3.

- First there was a stair form scheme (Figure 3.4) in a 2 axes quadrant with time in months (X-axis) and the advance of indicators in percentage (Y-axis) to watch for the quality of the project making sure that the relations between the activities, outputs and outcomes were consistent and coherent with help of an outcome mapping carry out with the information of the project capacity building component called LF-Tree (Section 3.2.1. b.).

- The second part of the QAT-Plan had a table for monitoring and reporting about the advances of each level (process, output and outcome) to watch for the Accountability of the partners in the project, showing who was responsible to measure and report to, what kind of report was prepared and with what frequency (Patton, Kusek, Molund). It also had a top raw for external evaluation.

- The Verification tasks in this plan were also in a table of three columns for the frequency and responsible to watch for the Transparency in the diffusion of the information of indicators and the advances toward the targets.

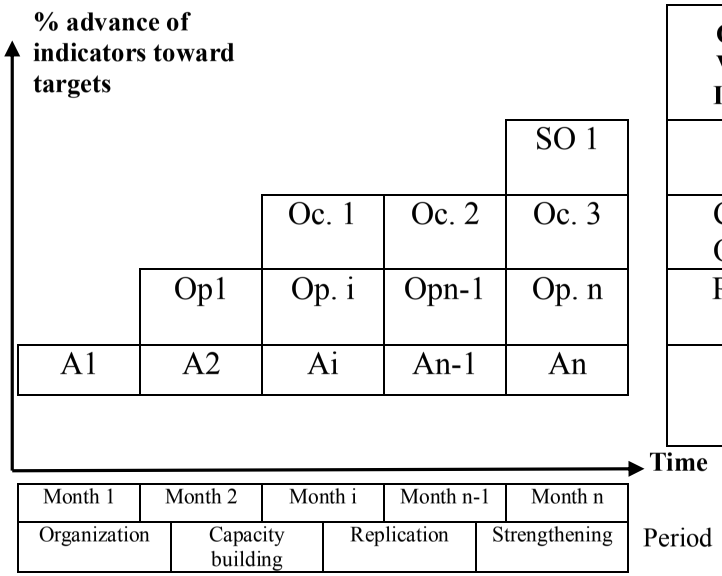
The Plan for Quality-Accountability-Transparency (QAT-Plan) fulfilled the requirements and counted with the cornerstones of a Fusion Model, by having the

Program Goal, Outcome described with targets and activities of behavioral changes and capacity building of partners, the progress markers measured with the indicators of inputs, processes, outputs, and changes. The information gathered for the QAT Plan was built on the three quality criteria of information for Results Based Management of Reliability, Validity and Timeliness (Kusek, p.108).

The model was established with the characteristics of the results-oriented Log-frame Approach and the process oriented learning pathway of the Outcome Mapping, what according to authors like P. Rogers was a useful tool for dynamic contexts to harmonize between various levels and stakeholders i.e. family-school-community-and local technical teams with indicators of complexity and non-linearity thru feedback loops.

A second part containing the roles and responsibilities of the stakeholders to monitor the corresponding indicators, to provide the short reports and to facilitate the discussion and learning process for accountability purposes.

And a last third part of verification of the project information for transparency purposes.



Objective Verifiable Indicators
Impact
Change - Outcome
Product - Output
Process
Inputs

Monitoring and Reports

Tasks and Instruments	Frequency	Responsible
Report of ext. evaluation	Midterm and final report	Director of partner
Report of monitoring Outcomes	Quarterly report of change indicators	Project manager of partner
Report of monitoring Outputs	Monthly report of product indicators	Field team coordinator
Report of activities	Weekly report of activities	Field team
Financial report	Monthly or quarterly	Director of partner

Verification Tasks

Tasks and Instruments	Frequency	Responsible
Internal and external evaluation	Annual Midterm and final period	Directors,
Supervision of outcomes	Semester	Partner leader Local govern. Supervisor
Monitoring of outputs	Quarterly	Specialist offi. Leaders and Authorities
Follow up of activities	Monthly	Project manag. Community
Follow up of budget	Monthly or quarterly	Administration Donor

Where:

Ai: Activities according the time table

Opi: Outputs

Oci: Outcomes

SO: Specific Objective

Figure 3.4 Theory of Change Plan for Quality-Accountability-Transparency
Adapted from Guachalla, 2005 and 2008

3.1.4 The Systematization Curve

The elaboration of the Systematization Curve (Sys-Curve) was based on the experience of several projects implemented during the past decades (Guachalla, 2005 and 2008). This curve resulted from the application of the QAT-Plan to the project and fit better to the reality of non-linear and dynamic context with participation of various stakeholders.

The Sys-Curves would allow the project participants to see for trends and examine changes overtime (Kusek, 2004). These findings could be used for accountability, allocation of resources, performance problem correction and to motivate personnel. Relating this experience to the recommendations of Patton, Rogers and Williams a loop analysis was generated with the project field teams, the community leaders and the committees at least every two months within the project cycle. Seldom though the initially proposed Log-frame goals were changed as Patton had suggested in 2012.

From point (A) in Figure 3.5 a straight line went up to the level of the target (black line), this straight line displayed the expected ideal advance; however, this was not the case usually. The real advance curve of the capacity building stage (see blue line) pointed out how the indicators of activities and products started slowly up to reach (almost) the ideal line at the end of the stage in point (B).

The phase of replication began at point (B) with usual slowdown in the progress of the outcome indicators because the community (committees, leaders) implemented alone what they had learned in the previous period. Finally the line in the last period of strengthening indicators showed the alternative ways to improve and to reach the target starting in point (C).

Patton (2012) went further and suggested that in the real world in complex, non-linear and dynamic context, the donors and authorities should be flexible enough to discuss possible variations of the targets according to the pathway of the indicators and the emerging situations. Here the criteria of accountability, he wrote, places the emphasis on understanding, supporting, and documenting adaptations and their implications.

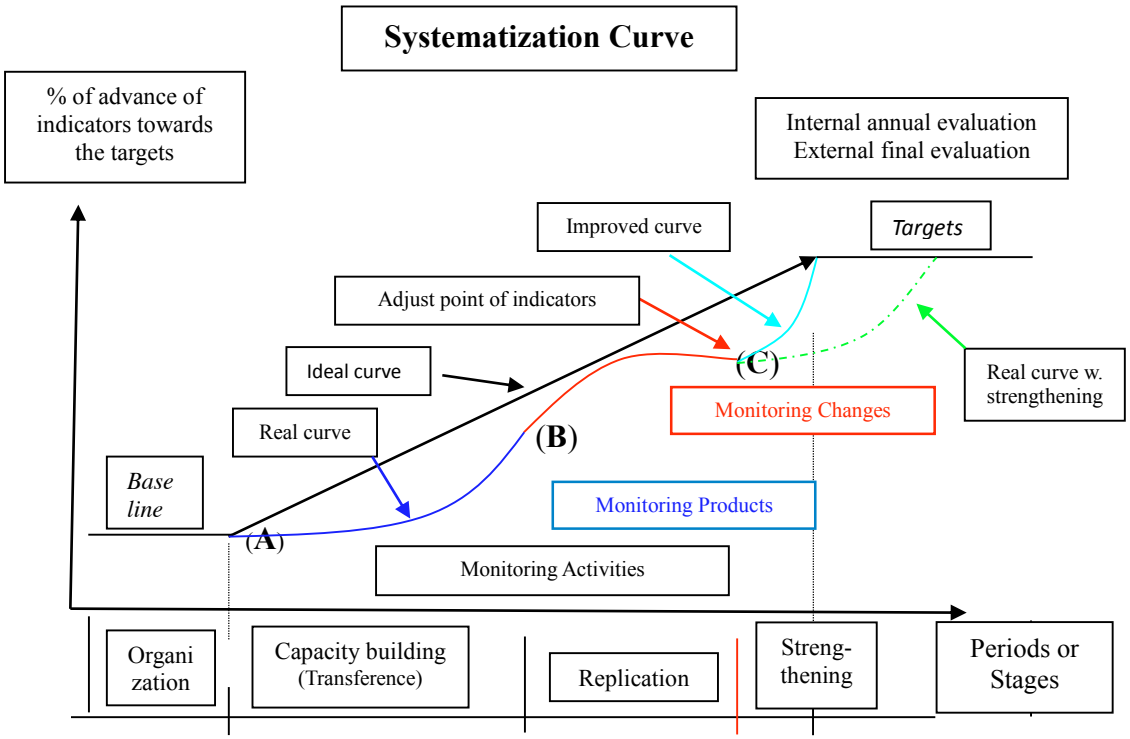


Figure 3.5 Systematization Curve
Adapted from Guachalla, 2005, 2008.

Where:

——— Ideal line of straight advance towards the goal.

——— Real advance curve in blue during the period of transference from point (**A**) up to point (**B**).

——— Red curve during the period of replication from point (**B**) until point (**C**), measured according the indicators in each village.

——— Improved curve, from point (**C**) up to the goal according to the planned time period of replication.

-·-·-·-·-·- Real curve for strengthening, from point (**C**), till the planned goal, using an extra time if needed for improving.

The development of the Sys-Curve in the practice of past projects was as follows:

- The field team organized the training plan with the local team for operation and management in the period of presentation of the project to authorities and communities. The baseline data was gathered in this period reaching point (A).

- In the period of Capacity Building the activities of the project team were monitored with process and input indicators and the corresponding products were determined at community level with output indicators achieving point (B).
- During the period of replication the intermediate results (expected outcomes) were measured using change indicators reaching point (C). At the same time the municipal technician and authorities were informed by the project team to learn to monitor the committees of the communities.
- At this point, the project team and the community got together to analyze the advances of the indicators and the weaknesses in the project. So, they defined in a participative format the strengthening of some indicators with more training or reinforcement activities to pursue to reach the proposed goals before the team left the community.

3.2 The Method for Project Planning, Monitoring, Systematizing and Learning

This method called for short PlaMSyL method is a practical numeric approach to calculate the advances of indicators toward the targets of a project and to prepare short objective reports for opportune decision making among stakeholders at the local levels of communities and municipalities or districts based on the theory of change Plan for Quality-Accountability-Transparency (QAT-Plan).

The abbreviation PlaMSyL stands for Project Planning, Monitoring, Systematizing and Learning. This name has been selected for the method, because it represents the main tasks of project local teams to follow and to keep learning and improving development projects for the wellbeing of the communities of their municipalities or districts.

It uses five static and three dynamic databases (DB). The static DBs are: the Geo-population list/map, the Log-frame, the time table, the personal chart for accountability purposes, and the QAT-Plan, which synthetizes the first four.

Based on the information of the static DBs the field team monitors and generates three dynamic DBs: the Field Information matrix, the calculation table of indicators of

Outputs and Outcomes, and the table of Qualification of Results. This dynamic process followed the calculation table recommended by the World Bank (Kusek, p.133) and the method went further qualifying those results, in order to facilitate a better analysis.

Table 3.3 Example of the Organization of the Method

	Log-Frame LF	Geo-population List/Map	Time Schedule	Personal Chart	QAT-Plan
Static Data Bases	↓ (see 3.1.2 and 3.2.1)	↓ →	↓	↓	↓ (see 3.1.3)
Examples of Information	List of OVIs and Smart Goals	Community list by municipality and period	List of activities by phases, periods and stages of the project	List of Personnel by position and Responsibility	Combination of the static databases for the monitoring plan
	• IR of Family improvements • IR of family changes • IR of community well organized • IR of up dated contributions • IR stakeholders' periodical coordination	List and location of families, villages by municipality or district	Examples: Phases I – II – III Stages 1-2-3-4-5 Semesters 1 to 3 Quarters 1 to 3 Months 1 to 8	Project Manager Regional Coordinator IEC Responsible Technical professional Field Team Leader Facilitators - promoters	1. Transformed LF 2. Accountability chart 3. Transparency chart OVIs, SMART targets, time schedule, personnel chart and geo-population information
Dynamic Data Bases	↓ Field Information data base	↓ Outputs-Outcomes database < ----- (see 3.2.2) ----- >	↓	↓ Qualified Results database	↓
	↓	↓	↓	↓	↓
	Sys-Curves (see 3.1.4) **- Analysis and Reports** (see 3.2.3) **Project Planning – Monitoring – Systematizing - Learning** **PlaMSyL Dashboard**				

Adapted from Guachalla, 2008.

These results were plotted in the Sys-Curves that supported the analysis (Kusek, 2004) and the objective Reporting. The curves were drawn based on the qualified indicators to compare between program sectors or constructed on the value of the indicators of each sector for comparing between sites of intervention.

The previous graphic was used to organize the elements of the method and to facilitate its application.

The goal of the method is to facilitate stakeholders objective and appropriate project information to learn and make opportune adjustments based on participative monitoring and criteria of Quality, Accountability and Transparency for better achievement of targets, facilitating ownership of participants (Kusek, 2004, p.106) and empowerment (Swedish International Development Agency, p.20, Fetterman and the World Bank).

This method was applied in programs of Water-Sanitation-Hygiene, Education, Nutrition and Health, Social Housing, Child Protection and Strengthening community resilience, and in projects of preparation and response to emergencies and disasters.

The Excel System of interconnected sheets used in the method can be adapted and applied at local levels (community and district and municipality) by project technical teams in developing countries.

3.2.1 Static Databases in the Planning Stage

a. Geo-population list and map.

The geo-population list/map contained information of the participant communities, such as population and location. The population data given in number of persons and families could be disaggregated by gender and age segment e.g. children (this in turn would be subdivided in early childhood, school age children and adolescents), adults, elderly, pregnant and lactating women. The target information was usually given in percentage.

b. Log-frame and the Outcome Mapping LF-Tree.

The Log-frame table contained the list of targets, indicators, means of verification and main assumptions and risks for inputs, activities, outputs, outcomes and specific goal.

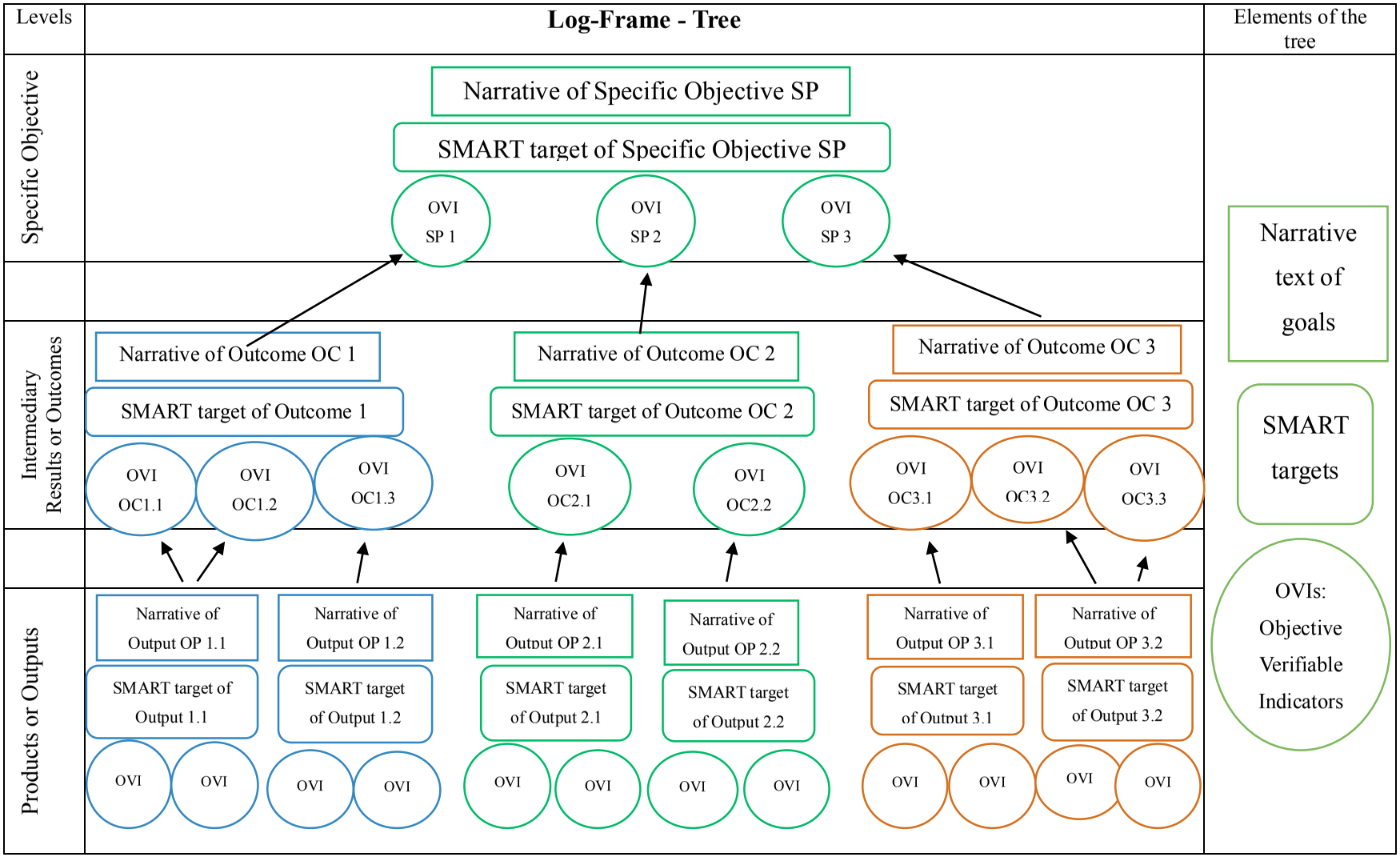


Figure 3.6 Elements of the Outcome Mapping Log-Frame-Tree
Adapted from Guachalla, 2008, 2014

Difficulties of coherence and consistency between the indicators and targets were solved in complicated and complex projects with the elaboration of an outcome mapping called Log-frame-Tree (LF-Tree), which helped to figure out the best and simple way to describe the connection between trained partners, and levels of outputs and outcomes for behavior changes with the corresponding indicators (Williams and Hummelbrunner, 2012) and the outcome targets. This instrument helped to perfect the LF.

Based on the fact that these projects dealt with capacity building, the LF-Tree fulfilled the criteria for an Outcome Mapping (OM) designed like a conceptual results map connecting logically three elements: the narrative text of goals, the targets and the indicators. Arrows were used to connect the elements between the levels.

It was recommended to use the trunk for the impact target population and the lateral branches for the participant target partners where the project would achieve outcomes (behavior changes) necessary for the achievement of the long term outcome.

In this way the guiding principles of the OM given by the authors in Chapter 2 were accomplished within the LF-Tree: Actor-centered development and behavior change, continuous learning and flexibility emphasizing effective Planning, Monitoring and Learning, cyclical, iterative and reflexive participation and accountability and non-linear contributions.

This Outcome Mapping was an proper complement to the Log-frame Approach to build a Fusion Model called the Plan for Quality-Accountability-Transparency (QAT-Plan).

It was also recommended to use different geometric forms for inserting the elements into the tree (e.g. rectangle for the narrative, oval for the targets and circle for the indicators, and also if possible, different colors (for each target population) to help following the elements between the levels.

c. Time table.

The time table contained the list of activities for each outcome by periods of the project, similar to the scheme below and the recommendation in Kusek 2004. The periods were usually subdivided in months.

Table 3.4 Outline of a Time Table

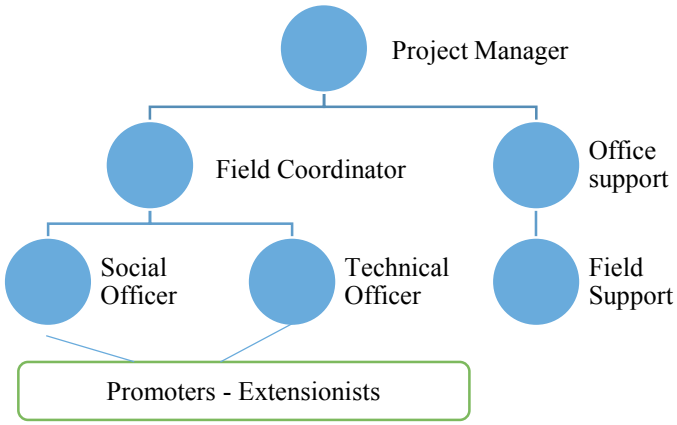
	Responsible	Period 1	Period 2	Period 3	Period n
Result 1 (Outcome 1)					
List of Activities					
Result 2 (Outcome 2)					
List of Activities					
Result 3 (Outcome 3)					
List of Activities					

Adapted from Guachalla 2008 and Kusek, 2004.

d. The Personnel chart for accountability purposes.

An appropriate project chart for accountability with the list of the personnel and the flow of reporting between levels should correspond with the levels of the Log-frame and provide information for the 2nd part of the QAT-Plan.

Table 3.5 Outline of a Personnel Chart for Accountability Purposes

Level of Accountability	**Personnel Chart**
General Goal (Strategic Plan)	Head of Office
Long term Outcome (Specific Objective)	
Medium term Outcome Intermediate Result	
Short term (Output) Product	
Activities	

Adapted from Guachalla, 2005 and 2008.

3.2.2 Dynamic Databases in the Field Monitoring and Executive Reporting Stages, the Questionnaire

The plan for gathering and systematization of field information, supported with a Questionnaire was discussed with the focal points and community leaders according to the figures of the static databases, the magnitude of the area and other constraints. The systematization of the information built on three dynamic steps and databases: The table for organizing the data of the field, the calculation table of indicators of Outputs-Outcomes and the Qualification of Results.

The next paragraphs describe in short the way how the calculation and qualification of indicators were done in tabular format. The next table fit well with the example given by the consultants of the World Bank (Kusek, et.al. 2004, p.132-133).

A step further was the qualification of the results because the calculation of the indicators of outputs and outcomes allowed the comparison between sites and periods and not between programs or sectors due to the different units of the results. By qualifying the results of the outcomes and outputs according to standards or the project targets it was possible to contrasts between sectors (programs), sites and periods.

The Results table was displayed in two pages (Table 3.6), the first part had the following general information: The name of the implementing counterpart, date of the project report, planed dates of the project start and end, length of the project, No. of participant communities and families.

The columns of the first page contained the following Log-frame-information:

- Code of specific objective (SO), results (OC: outcome) and products (P: output),
- The target of each objective, results and products in (%),
- Short narrative description of the targets,
- Quantity of expected results. This amount was calculated by the product of the target (%) and number of population (e.g. families) given at the top of the table,
- Narrative of the unit of the numeric target.

Table 3.6 Outline of the Table of Results

Implementing Partner: Date of reporting:	Start and End dates – Length of the project:	No. Communities No. Families

Information of the Logical Framework of the Project:

Code	Project Target %	Short narrative description of the targets	Target Quantity #	Description of the unit of the target
SO 1				
OC 1				
OC 2				
OC 3				
P 1.1				
P 1.2				
P 2.1				
P 2.2				
Etc….				

Adapted from Guachalla, 2008.

The percentage (%) of advance toward the target was calculated and qualified for each indicator in a specific period in the second page with help of the following columns:

- Code and the list of indicators,
- The implemented value in the period,
- Accumulative advance and
- Difference with the target.
- The % of advance calculated by the total advance divided by the target,
- The qualification of the advance (Table 3.7) according to the project target, or a standard (mainly in emergency projects) and/or the elapsed time of the project.

By qualifying the results in the development and emergency projects, a first concrete difference was found for the use of the method. In the development projects the % of advance toward the target was compared with the elapsed time, while in an emergency mainly the humanitarian standards were used as criteria for comparing and qualifying the calculated results.

Table 3.6 Outline of the Table of Results (second part)

Code	List of indicators OVI	Executed in period	Accumulative	Difference w. target	% of advance	Qualification
		(during the period of report)				
SO 1						
IR 1						
IR 2						
IR 3						
P 1.1						
P 1.2						
P 2.1						
P 2.2						
Etc…						

Adapted from Guachalla, 2008.

Another difference for the use of the method between development and emergency projects, was due to the fact that in development the Log-frame was part of the static databases and it could be transformed into the QAT-plan. However in emergencies, because of urgency and limited time surge teams had a list of minimal standards, globally accepted indicators (e.g. Table 3.8 and Annex 2 5.1) to be achieved and a few temporary targets according to a limited budget to ensure an appropriate monitoring of the humanitarian performance.

Table 3.7 Example of a Range for Qualifying Results Indicators

- Very good if the result in % was between 90% and 100% of the target and it was colored green
- Good if the result in % was between 75% and 90% of the target and it was colored yellow
- Regular if the result in % was between 60% and 75% of the target and it was colored purple
- Low if the result in % was between 50% and 60% of the target and it was colored orange
- Very low if the result in % was below 50% of the target and it was colored red

Explanation of the qualification	
Very good	5
Good	4
Regular	3
Low	2
Very low	1

A rank of 3 levels was used initially: good (3), regular (2), and poor (1). However, in the practice it was necessary to distinguish between those families or communities which had for example 2+ or 2-, therefore we started using 2.5 and 1.5. But instead of using decimals, we opted to change the scale from 1to 3 to 1 to 5. The literal qualification (e.g. good, low, etc.) was adapted to the context in each project.

The next table shows examples of the calculation and qualification of indicators.

Table 3.8 Examples to Calculate Indicators for the Sectors of Education and Water-Sanitation-Hygiene

Definition of Indicator	Definition of the Numerator and Denominator of the indicator	Calculation of the Indicator	Numer-ator	Denomi-nator	Indicator	Unit
# and % of school-aged children including adolescents reached by schools (including in schools in affected areas still functioning, re-opened schools and/or temporary facilities established)	Numerator = # schools still functioning + # schools re-opened + # temporary facilities X estimated average # of children per type of facility agreed at cluster level	Ratio between in school affected children and total affected schoolchildren	# of affected children in school activities	Total # of affected schoolchildren		
	Denominator = total # school aged children in affected area (aged 4-6 years as target for pre-primary; aged 6-14 as target for basic; aged 15-18 as target for post-basic)	DCC - Primary - Secondary	A1	B1	A1/B1	%

DCC: Day Care Center

# and/or % of population with access to 15 liters of water per person per day	Numerator = # of water sources for each type of water source X # of people to be served by each type of water source	Ratio between daily volumes of water supplied to families in a specific area and the # of people using it.	Volume of water supplied daily to an area	Total # of affected people in this area using this water	OVI	UNIT
	Denominator = # people in the affected area		K1	L1	K1/L1	lt/per/day
# and % of people living in faeces free environment	Numerator = # of communal toilets established for women + # communal toilets established for men + # of family toilets X # of people targeted for each type of toilet	Ratio between # of people using toilets and the # of toilets	# of persons in an specific area	# of toilets available to these persons	OVI	UNIT
	Denominator for all = # of people in affected areas		K2	L2	K2/L2	pers/toil.

Adapted from Humanitarian Performance Monitoring toolkit in the Philippines (2012, 2013) and Sierra Leone for the Ebola emergency (2014-15). Guachalla, 2013 and 2015.

The three examples below show the way how indicators were qualified in the practice. First the indicators were calculated by dividing the numerator by the denominator, as the Table 3.8 and Annex 2 5.1 explained. The obtained value of the indicator was compared with a standard or a target or the elapsed period of the project to see if the advance was good, regular or low.

The value of the indicator was qualified within a range (in this case from 1 to 5) and was given a color to facilitate the discussion with different stakeholders, leaders and committees of the community or authorities and management, who were supposed to make decisions based on the feedback of the monitoring officer.

Table 3.9 Examples to Qualify Indicators

a. The first case of the percentage of school children going back to school activities after an emergency was calculated with the number of school children back in school activities divided by the total number of affected school children. The qualification was given by the following table.

Children back in school activity		
%	Grade	Qualification
>90%	5	Very good
70-90	4	Good
50-70	3	Regular
25-50	2	Low
<25	1	Very low

b. The second case of people getting enough water for consumption in evacuation camps showed other units in the qualification scale from 1 to 5. According to the Standard recommended in the Sphere Project 15 lt / person / day was the minimal amount of water in camps. Other sources like the UNICEF's Core Commitments for Children in Emergencies suggested a minimal amount of water varying from 7.5 to 15 lt/per/day given the conditions of water sources in place. And the qualification was given according the next table.

Water Supply	Performance	
l/p/d	Qualification	
>40	Very good	5
>15	Good	4
10-15	Regular	3
7.5-10	Low	2
< 7.5	Very low	1

c. The third example was the qualification of an inverse case. The more people per toilette in an evacuation center the less accepted was the performance, being the standard value 20 persons or less per toilette.

Toilette coverage	Performance	
pers/toi	Qualification	
5:1	Very good	5
20:1	Good	4
50:1	Regular	3
<100:1	Low	2
>100:1	Very low	1

According to the project Sphere, 50:1 could be acceptable at the beginning of a large emergency.
Adapted from Guachalla 2013, 2014, 2015

- Questionnaires

The collection of the field data had to be consistent and constant following the Plan for Quality-Accountability-Transparency, thus a questionnaire was used to help the collection of the same type of data in different periods and places with the following criteria:

- The questionnaire contained a list of interrogations related to the information of the data to calculate the indicators. The inquiry form was organized according to the programmatic areas e.g. Water-Sanitation-Hygiene, Nutrition-health, Education (see Table 5.4 for a complete list of indicators used in emergencies).
- The questions were asked to get the specific information of the numerator to divide it by the target (denominator) to compute the percentage of advance.
- In cases that the target was a standard e.g. provision of 15 liter per person per day or in sanitation 20 persons per toilet, the questions were so organized to get the information to calculate the corresponding numerator and to divide it by the number of attended population, or vice versa e.g. the population divided by the # of toilettes, in order to get the value of the indicator, similar to Table 3.9.
- Then the computed value was compared with the standard to qualify the Objective Verifiable Indicator (OVI).
- The period of the data collection was another criterion to ask the right question, because in development projects the reports were required every quarter, so the questions would be related to the advances of outputs and outcomes. However, in emergencies the report was at least every month (if not every two or even one week as in the Ebola emergency in Sierra Leone), so the questions were related to the achievement of the humanitarian aid distributed among Internally Displaced People and the qualification was given by the level of achievement of the required standard.

Because several sites were visited in each monitoring round an Excel system was used, similar to Table 3.6 (Kusek, 2012). This tools were helpful to facilitate the discussion about the situation and the feedback loop with the field team and leaders and authorities in charge to see to improve the low indicators.

During the monitoring practice the questionnaires were important and helped field teams to learn to use the adequate questions for getting the required information to determine the indicator. However, after a while the team could decide to keep using the questionnaire or to gather the field information direct in the table format to calculate the indicators later.

In the course of the attention of large emergencies in the Philippines and Sierra Leone, it was found that despite of the saved time the Questionnaires were important tools to generate a dialogue with the affected families and leaders about the program goals in their camps.

An important improvement was found from side of the people in charge of the emergency camps and the affected families after it was discussed with them the information periodically, so they were better organized to keep their camps according to humanitarian standards for their own good. The World Bank (2002) and Fetterman (2010) had recommended this issue on empowerment for own progress.

3.2.3 Preparing the Executive Report

The report to participants, field teams and management about the advances toward the targets was organized according to the information of the indicators of Outputs and Outcomes and their qualification. This helped the analysis and a narrative of possible bottlenecks to recommend some adjustments. The examination was improved with the elaboration of Sys-Curves, which enhanced the systematization of the information, the comparison between indicators (Kusek p.132) and the reporting.

In emergency projects, the reports were prepared in short tables with the key information:

- Table of calculated indicators provided by site and program.
- Short summary of the data of the outputs and outcomes by sector and main indicators.

Here the qualification of the indicators facilitated the comparison between sectors and the objectivity of the report.

- Conclusions and recommendations based on the previous charts.

The calculation and qualification table (Table 3.6) was used in development projects as a summary dashboard with the main findings of the periodic monitored indicators. While in emergencies were both the Results table and the Qualification table, which provided the information needed for reporting.

There was a third concept to observe related to the time periods of the project. In development the reports were organized by period, site and program or sector in contrast to the emergency projects, where the executive report was organized by sector and site, because the periodicity was determined by the urgency of the emergency.

3.3 Conclusions

This chapter presented first the elaboration, elements and details of the practical numeric approach of the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) with the Project Cycle and the progress of the Theory of Change Plan for Quality-Accountability-Transparency with the characteristics of a Fusion Model, that merged the results-oriented Log-frame Approach with the process-oriented learning pathways of the Outcome Mapping, and the Systematization Curve that completed the tools for transparent reporting.

The chapter also summarized the calculation and qualification tables for objective verifiable indicators mainly at the levels of direct and intermediate (outcomes) results and for long term results too.

The method as it was explained by different authors in the second chapter, can be used also in contexts with certain levels of complexity, as for example when several stakeholders participate in the decision making.

In the explanation of this chapter was clear that the method PlaMSyL could be used in planning and monitoring of different kinds of projects like development and emergencies, with challenges of different time periods for monitoring, reporting and learning. In particular in the practice of field monitoring there were opportunities for feedback loops with local people of communities or emergency camps for learning and improving the projects.

In summary, the method has facilitated:

- The participation of local teams to learn to get information, to calculate and to use indicators in different formats: numerical, graphical, in color and as variables and normative values (standards).
- It allowed a transparent use of the project information, achieving a high level of quality and facilitating the accountable participation of stakeholders.
- It permitted the feedback between the project field team, community leaders and the monitoring officer, learning from the differences (Patton, 2012, Kusek, 2004 and Rogers 2012) between the planned and implemented results in a dynamic, non-linear and complex project cycle.
- Finally it facilitated the awareness and thus the empowerment of the leaders and participant families to improve their wellbeing.

Some of the tools used in the method were innovative, as for example:

- The Outcome Mapping Log-frame-Tree, that helped to improve the coherence and consistency between indicators and targets of the Log-frame,
- The Personnel Chart organized for an accountable reporting,
- The elaboration and use of the theory of change QAT-Plan as a Fusion Model merging the results-oriented Log-frame Approach and the process-oriented learning pathways of the Outcome Mapping based on the criteria of Quality, Accountability and Transparency,
- The elaboration and calculation of the static and dynamic databases in simple excel formats appropriate for developing countries and the qualification of indicators to facilitate the comparison by periods and between sectors and sites,

- The Systematization Curves for better analysis (Kusek, 2004) and objective reporting,
- The executive short and objective reports according to the results and their qualification.

It facilitated also the awareness of the participants and in consequence their empowerment in particular of communities benefiting from the projects to be in charge of the sustainability of their services and projects.

It was described also that the method can be used elsewhere in developing countries because of the simple excel system developed for the static databases, to calculate the dynamic databases and to prepare the Sys Curves and Reporting. And what is more important it can be used at local level by technical teams of Non-Governmental Organizations or local governments, who work closer to the communities generating a bottom up approach.

The emphasis of this dissertation is to strengthen the Local Technical Teams (LTT) of local governments like municipalities or districts because of their responsibility and closeness to the communities where the UN planned to reach the Sustainable Goals 2030. However, because of organizational and financial weaknesses sometimes these teams were not able to make frequent monitoring visits to the participant communities. For this reason, it is also recommended to strengthen Non-profits and NGO field teams with this method, because they have presence at the local level and work together with LTTs of municipalities or districts.

The next three chapters will explain the use of the method in three different scenarios and projects, two of them for monitoring a development project and a large emergency and one for planning a project proposal in a complex environment.

Chapter 4 Application of the Method in a Development Project

4.1 Introduction

A regional project for strengthening the community resilience with Local Technical Teams has been implemented by the UNICEF´s Latin American and Caribbean Regional Office with participation of five countries Guatemala, Honduras, Cuba, Peru and Bolivia from September 2013 till May 2014 and financial support of the Belgian government.

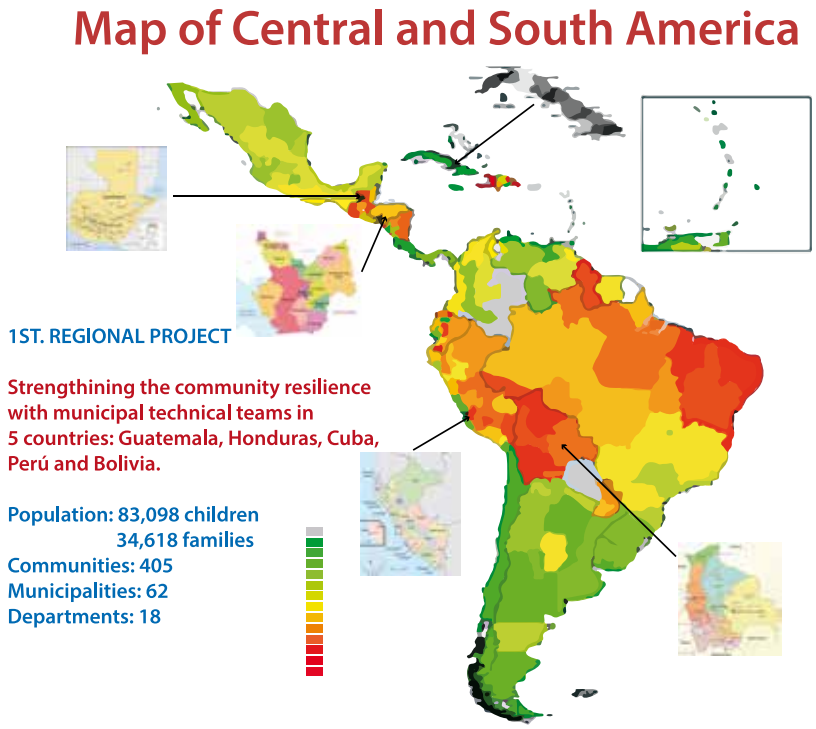


Figure 4.1 Map of Location of the Regional Project
Initial project workshop in the Regional Office in Panama 18-20.09.13.

This chapter describes how the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) was used during the regional project to elaborate the static databases in the planning stage, to utilize the field monitoring reports of each country and to systematize, to learn and to prepare the regional consolidated report with the advances in each country.

The proposed strategy (Guachalla, 2012) was to train Local Technical Teams to replicate preparedness activities against primarily natural hazards at community level, which included members of the village committees for risk management (called CLE for Local Committee for Emergencies) and to implement preparation tools with school children, who replicated their knowledge at family level. The higher regional and national levels of departments and ministries would be informed to coordinate activities.

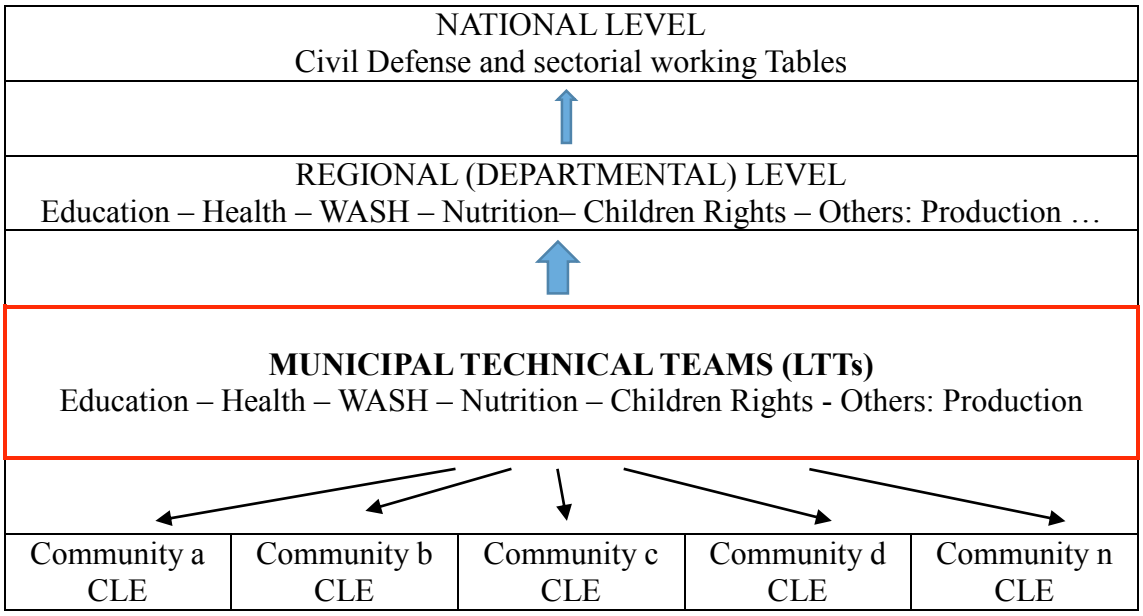


Figure 4.2 Scheme of the Strategy of the Regional Project
Adapted from initial project workshop in the Regional Office Panama 18-20.09.2013.

The main objective was to strengthen the resilience of 405 vulnerable communities in 62 municipalities of 18 Regions (departments or province) in five countries in preparation for emergencies within Disaster Risk Reduction[6] (DRR) working with:

- 405 Local Emergency Committees (LEC or CLE for its Spanish acronym),
- 62 LTTs (in some countries this level corresponded to Municipal or District),
- 18 Regional technical teams (RTTs, called in some countries Departmental Technical Teams) to coordinate with the 62 LTTs,
- To reach 37,318 families.

[6] The terms of RM risk management or DRR Disaster Risk Reduction are used indistinctively, however since the Sendai Framework of Action, the term DRR is preferable.

Table 4.1 Summary of Expected Results Framework

At the End of workshop	3 Months Post-Workshop	6 Months Post-Workshop	9 Months Post-Workshop
Organogram of COE (w. names and position of responsible persons in charge and part of the commissions)	Three Municipal Resolutions: 1. Organization of the L-COE 2. Prevision of 3% to 5% of the Annual Budget for Attention of Emergencies 3. Organization of at least two sectorial working tables (social and productive).	# of replication Workshops in vulnerable Municipalities	# of replication Workshop in vulnerable Municipalities
		# of replication Workshops in vulnerable communities	# of replication Workshop in vulnerable communities
Summary Table Completed with Map (4-8 vulnerable communities to an specific threat)	Summary Table with complete Information (all vulnerable communities, at the beginning of fiscal year)	# & % de Health Centers with emergency activities plan PAE (1 page) (list of medicines , # of patients or population to attend)	# & % de Health Centers with emergency activities plan (1 page) (list of medicines , # of patients or population to attend)
# of Participants of local governments	List of pre-positioned humanitarian supplies	# & % of CAPYS with emergency activities Plan (1 page) (list of supplies of W&S to make reparations and attention of population)	# & % of CAPYS with emergency activities Plan (1 page) (list of supplies of W&S to make reparations and attention of population)
		# & % of Schools with RM-classes and implemented Simulation	# & % of Schools with RM-classes and implemented Simulations
		# & % of organized Communities with Local Emergency Committee (LEC)	# & % of organized Communities with Local Emergency Committee (CLE)
		# & % of Community Risk Maps	# & % of Community Risk Maps
		# of Families with Emergency Supplies	# of Families with Emergency Supplies

NOTE:

M-COE: (Municipal) COE (Center of Operations in Emergency)

PAE: Emergency Action Plan (for its Spanish acronym)

LEC: Local Emergency Committee (or CLE for its Spanish acronym)

CAPYS: Committees of Water and Sanitation at community level

W&S: Water and Sanitation

Adapted from Project Proposal. Guachalla, 2012

The Table 4.1 contained a summary of the results framework expected to be achieved by the Local and Regional Technical Teams at community level and children in schools in the period of 9 months starting with the training workshop in Preparedness for emergencies and disasters at local level. A similar table had been used with local technical teams in previous projects to guide them to aim and reach the goals of the project according periodical revisions.

The regional office of UNICEF would facilitate the consolidated report to the donor and one field visit of the project coordinator to each country. Each team would coordinate the starting workshop with the counterparts to proceed to the local level and communities.

4.1.1 General information

Once the project was approved, an initial workshop was facilitated with the UNICEF country officers in the regional office in Panama to plan the implementation of the project. A first plan for monitoring and reporting was agreed among the participants. The country officers would send four monitoring reports (three partial and a final report, May 2014) to the coordination to consolidate a report for the regional office.

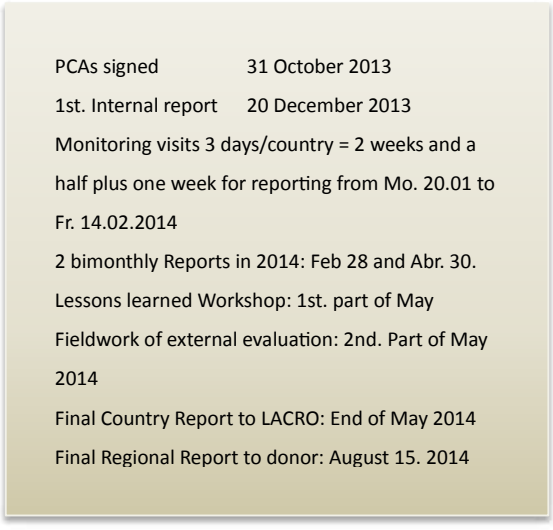


Figure 4.3 First Plan for Monitoring Reports
Starting Workshop in Panama, 18-20.09.2013

4.2 Use of the Tools of the Method

The tools of the method for Planning, Monitoring, Systematizing and Learning (PlaMSyL method) were used to merge first the information of the countries in the project proposal and then for general monitoring and reporting. The project coordinator arranged the static databases with the information prepared by the country offices for the regional project proposal and revised in the first regional workshop.

4.2.1 Static Databases and the Questionnaire in Table Format

The static databases of the project were:

- Log-frame (LF) improved with the LF-Tree,
- Geo-population list-map,
- Timetable,
- Personnel list,
- QAT-plan.

The Log-frame in Annex 1 was consolidated with the information of the five countries using the format provided by the regional office. The outcome mapping LF-Tree was built on the components of the frame: narrative goals, targets and main indicators to find the coherence and consistency between the aimed outputs and outcomes of the two partners of the project: the municipal (local) technical teams and the regional (departmental) teams and the target groups of the community committees for Disaster Risk Reduction and the children in the schools and their families.

The LF-Tree in Figure 4.4 fulfilled the four guiding principles of an outcome mapping: Actor-centered development and behavior change – Continuous learning and flexibility – Participation and accountability – Nonlinearity and contributions of stakeholders completed with the other static databases.

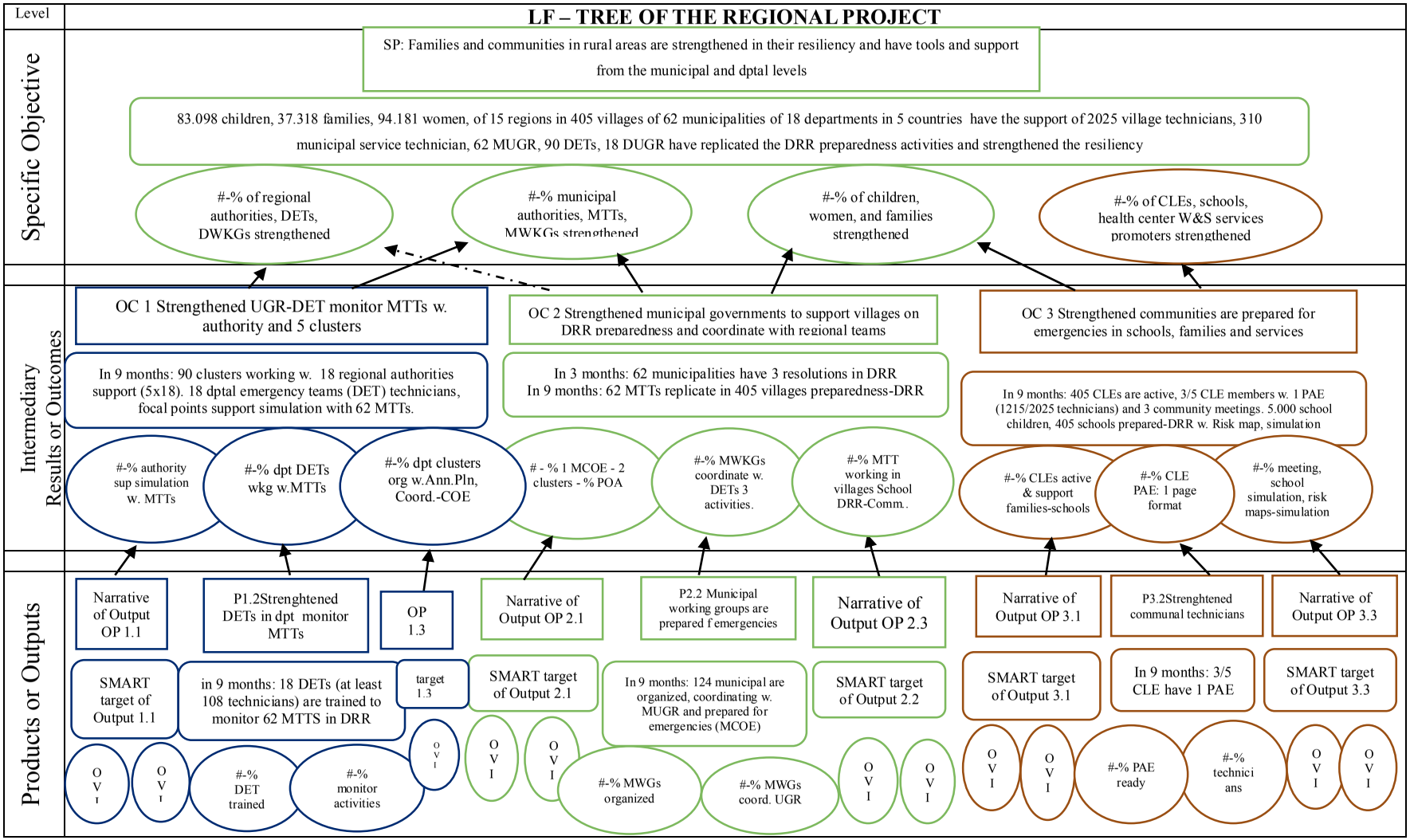
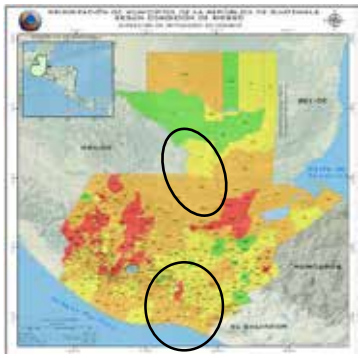


Figure 4.4 Example of Elements of the Outcome Mapping Log-frame-Tree
Adapted from the Static Databases of the Regional Project. Guachalla, 2014.

The following maps show the location of the Project in each country:

IN GUATEMALA:



IN HONDURAS:

Sources: Final Reports and PPT presentations of Guatemala, Honduras, Bolivia, Cuba and Peru project teams.

IN BOLIVIA:

IN PERU:

IN CUBA:

Figure 4.5 Country Maps with Project Location
Adapted from the Regional Project Final Report. Guachalla, 2014.

The information of the geo-population list is in the Annex 1.

Table 4.2 Consolidated Project Population

No.	Description	Unit	**Honduras**	**Cuba**	**Guatemala**	**Peru**	**Bolivia**	Total
1	Participants	persons	40.690	30.067	24.000	38.100	52.640	185.497
2	Families	family	8.138	7.500	4.800	6.350	10.530	37.318
3	Children	persons	18.858	12.000	12.000	15.240	25.000	83.098
4	Women	persons	20.283	15.322	12.000	19.206	27.370	94.181
5	Men	persons	20.407	15.872	12.000	18.894	25.270	92.443
6	Villages		43	24	32	76	230	405
7	Municipalities		6	8	16	20	12	62
8	Department or province		2	1	4	7	4	18

Adapted from the Project Proposal. Guachalla, 2012.

The general Time schedule of the Project was summarized in the next table:

Table 4.3 Outline of the Time Table

Result / Period	Period 1 Month 1 - 3	Period 2 Month 2 - 5	Period 3 Month 4 - 8	Period 4 Month 8 - 9
Result 1 (Outcome 1)	The departmental governments have been prepared and strengthened in order to allocate sufficient funding to support prevention activities in vulnerable communities …….			
List of main Activities	Selection and training of Departmental Emergency Team (DET) in conjunction with the departmental authority Replication of training in Municipalities of the project with DETs Definition with municipal teams of a minimal budget for emergency preparation			
Result 2 (Outcome 2)	The municipal governments strengthened in RM and AD had undertaken the actions of mitigation and preparation with vulnerable families and their communities …….			
List of main Activities		Selection and training of the municipal technical teams MTT with a plan to replicate in the vulnerable communities of each municipality Replications of MTT training in the selected communities of the project Organization of the municipal COE and 2 working sectorial (social and productive) platforms in coordination with the municipal unit of Preparedness		
Result 3 (Outcome 3)	Vulnerable communities, their authorities, and families have been prepared and have participated in the tasks of prevention with the Government and completed sustainable mitigation activities with the municipal technical teams ….			
List of main Activities			Selection of the CLEs and replication training of the MTTs in communities Simulation in the main community with school, health centre and other services in coordination with MTTs.	
Monitoring and Evaluation	Continued internal monitoring in each country by UNICEF and partners. Regional monitoring according to the initial plan: Feb – April 2014			Internal workshop for lessons learned. Initial external evaluation

Adapted from the Regional project proposal, Guachalla et.al. 2012.

This time table reflected the cascade strategy that helped to organize the project with the country teams during the first workshop in the regional office. Then, the country officers have transmitted and adapted the strategy to the reality of each region with local partners. This chart summarized the information of the table of the excel file where the activities were detailed by month and by result.

The excel file would help later to calculate the advances of the regional indicators and to consolidate the information of the countries for the regional report.

Table 4.4 Office Personnel for Project Management and Monitoring

Country	Function	Status	Number of staff	Number of man/ month in project	Comments
Bolivia	Coordination Technical assistance DRR and Emergency Officer support M&E officer support Supply support	Staff of implementing partner Staff of implementing partner UNICEF local staff UNICEF local staff UNICEF local staff	1 2 1 1 1	9 9 4,5 1 1	The implementing partner(s) will be in charge of the project personnel The DRR-E Officer will coordinate the national and regional project. The M&E will support the monitoring of the project and the TOR for the external evaluation The Supply Officer will support the acquisition of supplies and make sure of a properly prepositioning
Peru	Project coordination Programme Assistant	National Officer General Service Officer	1 1	10 5	Including one month for the final reporting Only 50% of the time of the Assistant will be dedicated to the project.
Guatemala	Project management and co-ordination	National Specialist	1	1	
Honduras	Project management and co-ordination	One National Specialist and one Programme Assistant	2	6	Staff members of UNICEF supporting project implementation
Cuba	Project manager	National officer	1	1	As in all cooperation projects with the Cuban state, staff of the implementing partner will be assigned to this position in the project with no cost implications for the organization
Regional Office	Project coordinator	International specialist	1	1	Coordination of project between the five focus countries, M&E/reporting Support to info management and knowledge/experience sharing Organisation of the regional workshop

Adapted from the Project Proposal, Guachalla, 2012.

The Plan for Quality-Accountability-Transparency joined the static information of the previous matrixes within the limitations of the available time and personnel in each country. The plan supported the organization of the tasks for monitoring at local level as well as at general regional level and facilitated the coordination with the officers in charge for the field visits to the areas of the project.

Table 4.5 Outline of the Project's General Plan for Quality-Accountability-Transparency

Level / Periods	Period 1 Months 1 - 3	Period 2 Months 1.5 - 5	Period 3 Months 4.5 - 8	Period 4 Months 6 – 9	Short list of (OVI) Indicators	Frequency	Responsible	Means of Verification
External evaluation towards Specific Objective	Children and women of 37.318 families in high risk municipalities (prone to flooding , drought, earthquake, hailstorm and freezes) in 18 departments and 62 municipalities and 405 communities of the 5 countries				# & % children replicating # & % families w. emergency pack # & % women participating	End of project	Regional office	
Monitoring changes of Result 3			405 Local Emergency Committees (LEC) trained and in charge ..... At least 3 of 5 professionals-technicians have their one page plans for emergencies .... 3 community meetings on DRR (every two months) with MTTs		# & % of LECs trained and … # & % CLE members with PAE # & % DRR community meetings	Monthly to by-monthly	Project coordinator w. country teams and local RM authorities	By-monthly country report Regional visit monitoring report
Monitoring changes of Result 2		62 municipal inter-sectorial technical teams (multidisciplinary) trained on preparedness Replications in 405 communities in 18 departments by 62 municipal teams 62 Municipal governments coordinate at least three times with 18 departmental RM units			# & % MTT trained on RM # & % replications in communities # & % MTT coordinating w. DU	Monthly to by-monthly	Project coordinator w. country teams and local RM authorities	By-monthly country report Regional visit monitoring report
Monitoring changes of Result 1	18 departments implement with 62 municipalities through the Units for RM 18 RM regional units monitor 62 municipal team replications at community level Organized 5 departmental sectorial working groups in 17 departments				# & % DRMT coordinating w. MTT # & % DU monitoring MTT # & % DRM working groups	Monthly to by-monthly	Project coordinator w. country teams and local RM authorities	By-monthly country report Regional visit monitoring report
Follow up of activities towards R1	Selection and training of DET Replication of training in Municipalts Definition minimal budget for emerg.				# & % DET participate in project # & % DET trained # & % DET defined budget f. RM	Weekly to monthly	Country team in coordination w. partners	Monthly report Local team monitoring visit
Follow up of activities towards R2		Selection and training of MTT Replications of MTT training in cmtt. Organization of the municipal COE			# & % MTT selected and trained # & % MTT training communities # & % organized MCOE			
Follow up of activities towards R3			Formation of CLEs, CLE and MTT replicate training Simulation in the main communities		# & % organized CLEs # & % coordinating training # & % community simulations			

Adapted from the Regional Project Proposal. Guachalla, 2012

Table 4.5.1 Example of the Honduran Project the Plan for Quality-Accountability-Transparency

QAT - PLAN of PlaMSyL PROYECT HONDURAS

IMPACTO								18858 NIÑOS (AS), 8138 FAMILIAS, 20283 MUJERES PREPARADAS Y FORTALECIDAS EN SU RESILENCIA A EMERGENCIAS		
RESULTADOS INTERNOS (CAMBIO)				6 CUADROS RESUMEN MUNICIPAL DE LAS COMUNIDADES (AMENAZA - POBLACIÓN Vulnerable - CAPACIDADES EN SERVICIOS y RECURSOS HUMANOS)	AL MENOS UNA REUNIÓN DE MONITOREO MUNICIPAL CON LAS COMUNIDADES DEL PROYECTO Y LA MANCOMUNIDAD	43 MAPAS DE RIESGO/ 43 SIMULACROS ESCOLARES 43 PLANES COMUNITARIOS DE GdR u HOJAS DE ACCIÓN EN EMERGENCIA (PAE de la Maestra, Enfermero y Comité de Agua)	6 MUNICIPIOS CON SUMINISTROS PREPOSICIONADOS			
	NOVIEMBRE	DICIEMBRE	ENERO	FEBRERO	MERZO	ABRIL	MAYO	JUNIO	JULIO	Fechas Alternativas
PRODUCTO (RESULTADO DIRECTO)	5-6 TEC., 6 ALCALDES, 3-4 ONG´S CONOCEN EL PROGRAMA, ALIADOS IDENTIFICADOS, UTI MANEJA ESTANDARES Y PRESUPUESTOS/ TECNICOS CONOCEN HERRAMIENTAS PARA CAPACITAR CODEM Y CODEL Y AVC	*RM1 : COMISIONES DEL COE MUNICIPAL CON RESPONSABLES (NOMBRE Y APELLIDO y CARGO) *RM2 : COMISIONES PRODUCTIVA Y SOCIAL CONFORMADAS *RM 3: % DE PRESUPUESTO PARA REPARACIÓN Y RESPUESTA ASIGNADO		* 43 CODEL'S CONFORMADOS/ * 43 ESCUELAS ENSEÑANDO Y PREPARANDOSE EN GDR	CODEM REFORZADOS Y CAPACITADOS 3 RESOLUCIONES MUNICIPALES EN CADA UNO DE LOS 6 MUNICIPIOS: UMA'S(6) INCORPORAN LA REDUCCIÓN DEL RIESGO EN SUS POA'S Y COORDINA ACTIVIDADES DE GESTIÓN DEL RIESGO EN EL MUNICIPIO (REUNIÓN MENSUAL CON LOS SERVIVIOS MUNICIPALES PARA EMERGENCIAS?)					
ACTIVIDAD	* TALLER TECNICOS UTI, CABILDEO, CON ALCALDES ONG'S EMP. PRIVADA * INFORMAR A LA MESA DE REDUCCIÓN DE RIESGO/ * UTI EJERCITA HERRAMIENTAS DEL PROGRAMA * TALLER COPECO A UTI Y EQUIPOS TEC. MUNICIPALES	REVISIÓN DE PLANES MUNICIPALES DE GESTIÓN DE RIESGO E INCIDENCIA PARA LA IMPLEMENTACIÓN DE 3 RESOLUCIONES EN LOS PRESUPUESTOS MUNICIPALES	* REVISIÓN DE PLANES MUNICIPALES DEGEST´IÓN DE RIESGO E INCIDENCIA PARA LA IMPLEMENTACIÓN DE 3 RESOLUCIONES EN LOS MUNICIPIOS * EQUIPO TEC. MUNICIPAL REPLICAEN LAS COMUNIDADES del PROYECTO * ANALISIS Y DEFINICIÓN DE SUMINISTROS. * PROCESOS DE COMPRA DE SUMINISTROS HUMANITARIOS	REVISIÓN DE PLANES MUNICIPALES DE GESTIÓN DE RIESGO E INCIDENCIA PARA LA IMPLEMENTACIÓN DE 3 RESOLUCIONES EN LOS PRESUPUESTOS MUNICIPALES/ ANALISIS Y DEFINICIÓN DE SUMINISTROS.	REVISIÓN DE PLANES MUNICIPALES DE GESTIÓN DE RIESGO E INCIDENCIA PARA LA IMPLEMENTACIÓN DE 3 RESOLUCIONES EN LOS PRESUPUESTOS MUNICIPALES/ ADQUISICIÓN DE SUMINISTROS/ ELABORACIÓN DE MAPAS DE RIESGO / EJECUCIÓN DE SIMULACROS ESCOLARES.	ADQUISICIÓN DE SUMINISTROS/ ELABORACIÓN DE MAPAS DE RIESGO/ EJECUCIÓN DE SIMULACROS ESCOLARES.	TALLER DE LECCIONES APRENDIDAS, EVALUACIÓN EXTERNA			

Adapted from the first Team Report from Honduras, 2014.

The preceding information of the static Databases: Geo-population list/maps, Log-frame (LF), LF-Tree, Time table, and personnel chart facilitated the elaboration of the general Plan for Quality-Accountability-Transparency criteria (QAT-Plan) in previous table.

Some country teams like Honduras designed their own Plan for Quality-Accountability-Transparency (QAT-Plan), which showed the main first part referred to the adaptation of the Log-frame with the Time table. The second part for reporting and verification, they had to follow the internal civil defense strategy, which in most countries was a national top-down approach.

The project coordinator provided to the country officers an example of one page table format to facilitate collecting the field information for the country reports, leaving to each team the initiative to use it or implement another similar tool that the counterpart already had. A short summary of the format is in the next table.

Table 4.6 Outline of the Questionnaire in Table Format

Country: _____ Date: _____
Municipality: _____
Community: _____

#	Information of families	Family prepared for emergency		Family participate in preparation		Services
	Name and committee	Situation	Training	Participation	Simulation	H–E–W-D
1						
2						
3						
#	Community Organization	LEC (CLE)	School	DRR	WASH	Other: Production
1						
2						
3						
#	Local government	LTT	COE	Emergency support	Coordination w. Regional	Guidelines
1						
2						
3						

LEC: Local Emergency Committee, DRR: Disaster Risk Reduction, WASH: Water, Sanitation, Hygiene.
LTT: Local Technical Team, COE: Center for Operations in Emergencies.
H: Health, E: Education, W: WASH, and D: DRR focal points
Adapted from the Regional Project. Guachalla 2014.

4.2.2 Dynamic Databases

The dynamic databases of the method Project Planning, Monitoring, Systematizing and Learning were:

- The field information tables, which were organized by each country team according to their own tools and civil defense system. Thus, the information of the Outputs-Outcomes table was send to the project coordinator.
- Outputs-Outcomes regional summary table consolidated by the project coordinator for the regional office report.
- Qualification Table of the consolidated Outputs-Outcomes matrix.

Each country team presented in the internal bi-monthly report a summary table with the advances of the indicators. With that information the country teams (3 out of 5) elaborated also the Output-Outcome dynamic table of the method.

In the next page there is a summary of the consolidated table of results with the indicators and the achieved targets of outputs and outcomes by country. This partial report matrix summarized the information for the project coordinator to work with an excel system to calculate the regional advances and qualify the results.

Further in the Annex 1 there is an example of the final merged dynamic database of qualified indicators of outputs and outcomes which was presented during the final workshop on lessons learned May 2014 in Panama.

The country teams, the regional office and the officer of the embassy of Belgium were satisfied with the explanation of the results and the way how the final PlaMSyL dashboard showed the advances of the project by country and in general.

The development of the Systematization Curves for further analysis was possible later based on the information of the dynamic databases.

Table 4.7 Consolidated Outputs and Outcomes Reported End of May 2014

Target	Expected Products and Result	Honduras	Guatemala	Cuba	Peru	Bolivia	Total
	INTERMEDIAT RESULTS OR OUTCOMES:						
18	departments participate w. 62 municipalities in training communities	1/1 UTI	4/4	1/1 prov. 10 Autor.	7/7	‘4/4	17/18
18	Departmental units monitor 62 municipal team replicating in 405 communities	1/1 UTI	4/4	1/1 prov.	7/7	4/4	17/18
5	Strengthened sectorial Commissions or working groups of COED with working plan	1/1 coordinated regional group		5 Prov.org. support proj.			
62	MTT replicate training in 405 communities (or with leaders of 405 cmmts.)	1/1 c 6/6 in 43/43	16/16 COMRED	8m in 24c and 29 esc.	22/20	12/12	64/62
62	MTT coordinate activities at least 3 times w. 18 departments	6 m c. 1 UTI +2v	16 – 4 +1v	8m/2v/1prov.	14 R-22 M +2v	+1v/10M/4D	54/62
2	Sectorial commissions in 62 municipalities coordinated by the UGR or similar unit					11/12	
62	Municipal or communal Humanitarian kits are delivered	12 comput. Equip.	16 y 32	Material MINED initial education	22/20 kits municipalities	In process	
405	Communities have a strengthened CLE or similar	43/43 CODEL	32/32 COLRED		117/100	269/230	396/405
405	Communities with preparation and response plans or technician of CLE w. own plans (PAE at least 3/5)	43/43	32/32		117/100	169/230 Plans PAE	240/405
405	Schools and/or communities with risk maps	43/43 .	32/32 .	24/24	117/100	85+219/230 Schs.–Cmdds.	302/405
405	Schools or communities made at least one simulation	43/43 .		24 Schl. w. evacuations	100	7+59/230 Dpts.-Esc.	228/405
405	Communities meet w/ MTT at least 3 times	43-6 +1v	32-16 +1v	24 c/ 12m	117-22 2v	204 c 12 +1v	399c/64m+1v
	PRODUCTS OR OUTPUTS:						
18	Departmental teans are selected and trained	1 UTI 6 technicians	4/4 CODRED	1 Prov	7/7	4/4	14/18
18	Departmental teams participate in replication of municipal workshops	1/1 – 6/6 UTI – Mun.	4/4 in 16 M y 32 C	1 Prov	7/7	4/4	14/18
62	MTT trained in preparation of emergencies (plus 8 education districts)	6/6 CODEM	16/16 COMRED	8 M y 58 directors	22/20	12/12	64/62
62	MTT organized activities in communities (or schools) in RM	6/6 w.CUSE		8m/29 Sch.	22/20	12/12	30/62
50	Municipal COE organized to coordinate w/ sectorial working groups	6/6 CODEM	16/16 COEM	Sch. Org.		11/12	32/54
405	Communities selected and organized their CLE or similar Community leaders trained	43/43 CODEL	32/32 COLRED	24 C–29 Sch.	117/100	269/230	396/405
62	At least 62 schools w. simulations in coordination w. MTT	43/43		8/8	117	6/12	36/46
5	Country Offices have reproduced the project materials w. logos	y	y	y	y	y	5/5 y

Adapted from the Final Consolidated Report to the Regional Office, Guachalla, 2014.

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The project coordinator facilitated the calculation of the qualification of the project indicators with the information of the Output and Outcome indicators of Table 4.8 from the country teams. The consolidated information of the Annex 1 was presented in Panama to the regional office, the officer of the Belgium Embassy and the members of the country offices, who participated in the workshop of lessons learnt. That was the reason why the Annex 1 is an example of the qualification table in Spanish.

The next Table 4.8 of Qualified Results was prepared in English for this document with the final results of the lessons learnt in Panama.

Table 4.8 Summary of Qualified Results at End of the 3rd Internal Report Period

Target	Expected Products and Result	Accumulated	Advanced %	Qualification	Range for Qualification	
	INTERMEDIAT RESULTS OR OUTCOMES:					
18	departments participate w. 62 municipalities in training communities	18	100%	5	5	Good
18	Departmental units monitor 62 municipal team replicating in 405 communities	18	100%	5	4	Acceptable
62	MTT replicate training in 405 communities (or with leaders of 405 communities)	56	90%	5	3	Regular
62	MTT coordinate activities at least 3 times w. 18 departments	52	84%	4	2	Insufficient
62	Sectorial commissions in 62 municipalities coordinated by the UGR or similar unit	23	37%	2	1	deficient
78	Municipal or communal Humanitarian kits are delivered	76	97%	5		
405	Communities have a strengthened CLE or similar	396	98%	5		
405	Communities with preparation and response plans or technician of CLE w. own plans (PAE at least 3/5)	241	60%	3		
405	Schools and/or communities with risk maps	302	75%	4		
405	Schools or communities made at least one simulation	228	56%	3		
1215	Communities meet w/ MTT at least 3 times	500	41%	2		
	PRODUCTS OR OUTPUTS:					
18	Departmental teams are selected and trained	15	83%	4		
18	Departmental teams participate in replication of municipal workshops	24	133%	5		
62	MTT trained in preparation of emergencies (plus 8 education districts)	68	110%	5		
62	MTT organized activities in communities (or schools) in RM	56	90%	5		
62	Municipal COE organized to coordinate w/ sectorial working groups	48	77%	4		
405	Communities selected and organized their CLE or similar Community leaders trained	396	98%	5		
5	Country Offices have reproduced the project materials w. logos	5	100%	5		

Adapted from Tables 4.7 and Annex 2.

The final column shows the qualification of the advances of the indicators according to the rank from 1 to 5.

The next figures of the Systematization Curves (Sys-Curves) were prepared according to the results of the countries and the regional project disaggregated by country and by indicator.

The Sys-Curves of the method Project Planning, Monitoring, Systematization and Learning (PlaMSyL method) facilitate the analysis of the information collected on the field (Kusek, 2004) in addition to the calculation tables of the advances of indicators and their qualification.

The monitoring tables and the Systematization Curves (Sys-Curve) complemented each other as far as the tables provided the values on how good an indicator advanced toward the targets and the curves described the trend of those indicators. The elaborated Sys-Curve facilitated the contrast between indicators and countries.

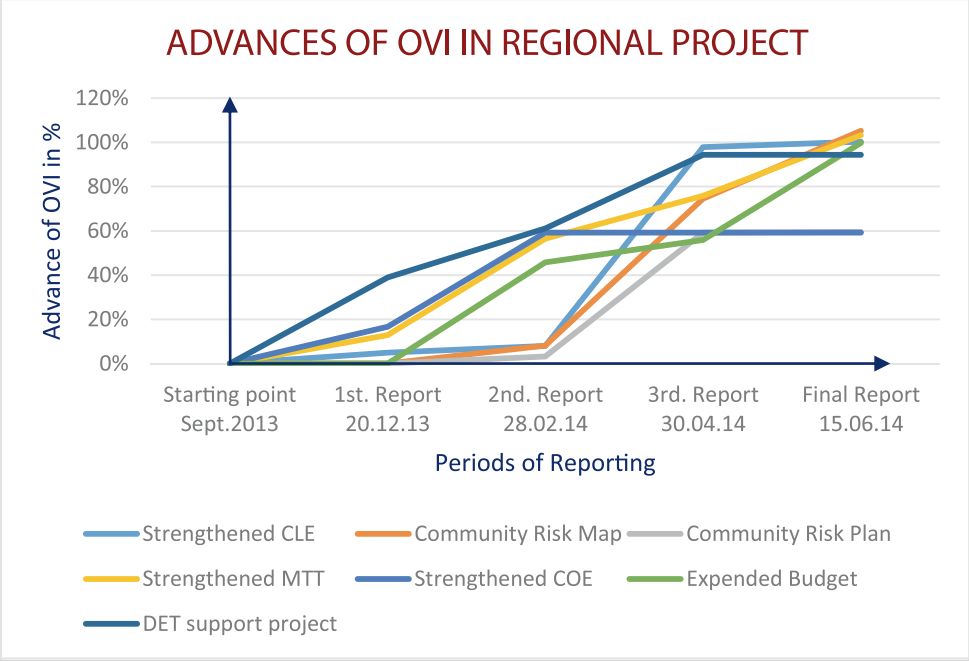
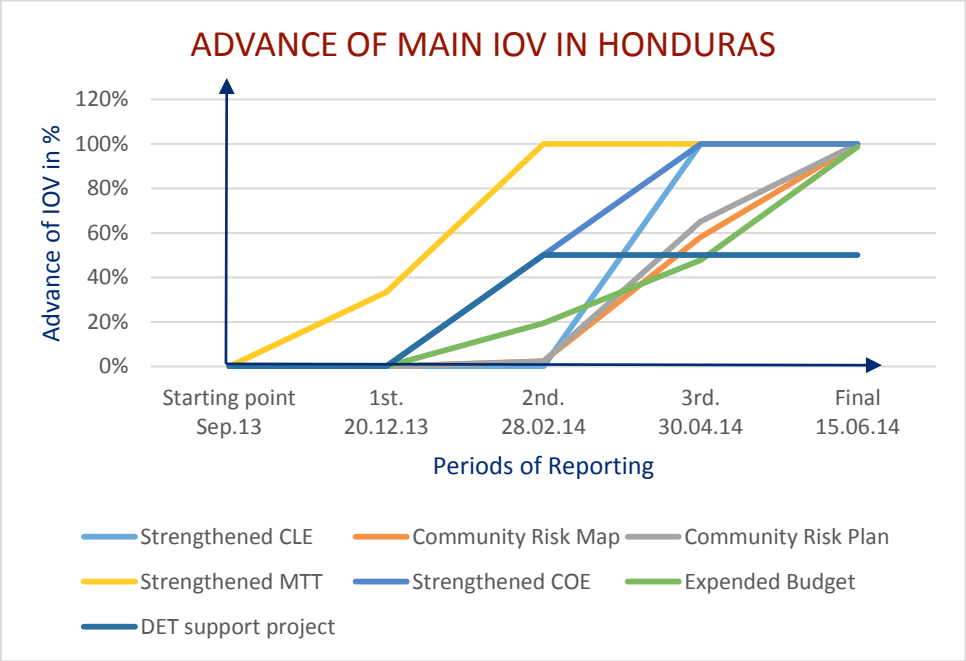


Figure 4.6 Systematization Curves of the Regional Project´s main Indicators
Presentation in the World Summit in Qingdao-China 2014, Guachalla.

The Figure 4.6 shows the course of the main indicators of the project as a result of the consolidation of the information about the work performed by the teams of the five countries.

The Figure 4.7 displays the examples of the curves of the same main indicators by country (e.g. Honduras) and the path of one type of indicator (e.g. Community Risk Map) for the five countries.



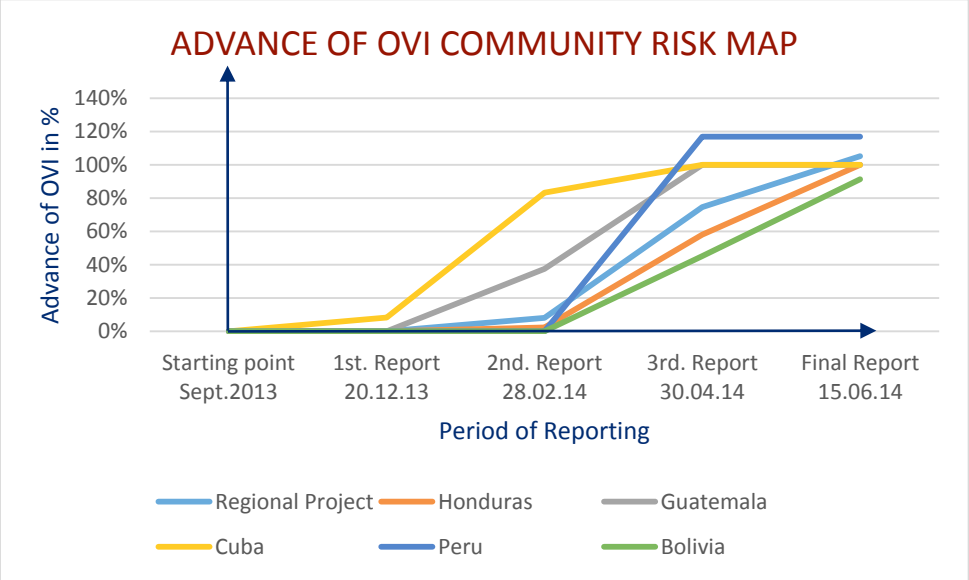


Figure 4.7 Systematization Curves of Indicators by Country and Regional Performance
Presentation in the World Summit in Qingdao-China 2014, Guachalla.

4.2.3 Reporting

Every two months the country teams prepared a report following a regional format that comprised the following topics:

- A summary of the activities implemented in the period,
- A summary table of the Results achieved in the period similar to Table 4.8
- A summary of the monitoring activities with the counterparts on the field,
- A summary of the expenses and % of the budget,
- A summary of the difficulties and plans for the next period.

The regional project coordinator consolidated the information of the countries and prepared a combined regional report for the office in Panama using the PlaMSyL dynamic Results table 4.8 and Annex 1.

4.3 Lessons Learnt: Achievements, Improvements and Difficulties

The steps followed during the Regional Project according to Table 3.1 of the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) were the planning stage of static databases and the stage of calculating the dynamic tables for the preparation of the consolidated executive report for the regional office in Panama. Due to organizational reasons each country team was in charge of the field monitoring stage, some teams were able to use the PlaMSyL dynamic databases for preparing their periodic reports, but in general they had to use the tools of the civil defense in their own countries and provided the output-outcome table report.

Several lessons were learnt during the application of the PlaMSyL method for regional monitoring and learning during the five-country project, as for example:

a. Achievements

a.1 The information of the static databases Geo-Population List/Map, Log-frame (LF) and the Outcome Mapping LF-Tree, Time table, Personnel Chart was

important, useful and coherent for implementing first the Fusion Model Plan with Quality, Accountability and Transparency criteria (QAT-Plan).
And then for generating the dynamic information about the advances of the indicators of the regional project by country and regional.
It was helpful for consolidation the information of the five country partial reports, even though some of them used different terminology in the Civil Defense systems.
a.2 The QAT-Plan and the LF-Tree helped to display the quality of the project as it was a clear relation between the levels of the LF, the indicators and the targets. It helped also the accountable personnel to report according to the advances of the indicators of the implementer partners (one of the requirements of the Fusion Model) as well as the difficulties of the project.
Finally, it pointed out in a transparent form the generated information for the Systematization Curves.
a.3 The calculated values of the output and outcome indicators facilitated the qualification of the indicators, both kind of information would enable the elaboration of the Sys-Curves. These would expose the progression of the indicators in a transparent form and the periods when the advances toward the targets (Kusek, 2004) were slow and when it had improved in order to recommend stakeholders about necessary adjustments to the project.
a.4 The example of this chapter has shown also that the QAT-Plan integrated the results-oriented Log-frame Approach with the Outcome Mapping's process-oriented learning pathways, based on the capacity building and continuous learning of the participants and counterparts like the local committees for emergencies and the school community to improve their resiliency. Displaying also that they had their outcome challenge, progress markers, strategy map and outputs of a Fusion Model.

b. Improvements in contrast to previous methods

b.1 The PlaMSyL method simplified the use of objective verifiable indicators which measured the advances toward the smart targets in different periods. These periods for measuring and monitoring could varied according to the plans and options of each country team, and still the method would enable the

calculation, the systematization of the indicators, and the regional analysis and reporting.

b.2 The qualification of the outcome indicators as it is presented in Tables 4.8 and 4.9 was a step further to analyze and compare the advances of the project by indicator and program, what would be not possible if the dynamic databases ended with the Output-Outcome table, because of the different units used in each sector.

The elaboration of the Sys-Curves would complement a better analysis, comparison and discussion with local stakeholders.

c. Difficulties to answer in future projects

c.1 Due to the short duration of the starting workshop it was not possible to exercise the method, so that the explanation to the country office teams was done during the first field visits. And according to the first time plan for partial and final reports, the field visits of the project coordinator to the participant countries and project areas were only one and disperse along the whole project.

Despite this difficulty the Honduran team was one of the first to participate in the project, and partners were able to use the method at best. Cuba and Guatemala were the other two teams that started using the method.

c.2 Due to financial constraints, it was not possible for the project coordinator to travel to each country right at the beginning of the project to work with partners on the application of the method on the field, nor it was possible to have one project coordinator in each country using the tools for monitoring with more frequency. Therefore the replication of the databases was limited to the country output-outcome report (see Table 4.8) which was consolidated for the regional report. Nevertheless, the information was valuable to work out the Results qualification table for each regional report (e.g. Tables 4.8 and Annex 1). Three out of five country teams prepared the Dashboard of the method.

It is recommended for future projects to exercise these tasks in detail during the initial workshop in a hands-on training and to facilitate the translation to the country partners as recommended in the workshop of lessons learnt. In this case, probably it would be necessary a 5-days workshop instead of 3-days to discuss the details of the static

databases of the project and mainly the calculation of the dynamic databases, the monitoring strategy, and the systematization and learning tasks.

It is also recommended to have monitoring officers trained in each country office to use the method as it was requested during the Lessons Learnt Workshop in Panama at the end of the regional project. So that, they could monitor the most representative areas of each project on the field to gather the necessary field information for discussing with different stakeholders on the field for learning together and necessary adjustments.

In next chapter is an example of the application of the method for Project Planning, Monitoring, Systematizing and Learning in the planning stage as well as the application during the stage of field monitoring in a large emergency as a complement to the experience of the regional project.

Chapter 5 Use of the Method in an Emergency Project

5.1 Introduction

The application of the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) in the large emergency of the Ebola Virus Disease in Sierra Leone from December 2014 till May 2015 has been an important contribution first to the Monitoring & Evaluation team for monitoring the performance of the humanitarian aid and then for the systematization of the method to validate the use of the tools during the stage of field monitoring in a complex and dynamic context.

5.1.1 Geographic Description

The Republic of Sierra Leone is located in West Africa with 6.09 million inhabitants (World Bank database of 2013) in an area of 72,740 km2. Freetown is the capital and major economic center of the country located in the west coast.

Sierra Leone is bordered by Guinea in the north-east, Liberia in the south-east and the Atlantic Ocean in the south-west. The country has a tropical climate with diverse environment ranging from savannah to rainforests.

Flag

Figure 5.1 Map of Sierra Leone
Wikipedia

Cost of Arms

The country is divided in four geographical regions: the Northern, Eastern and Southern Provinces and the Western Area. Each region is divided in districts and these in Chiefdoms:

- Northern Province: Kambia, Bombali, Tonkolili, Koinadugu, and Port Loko,
- Eastern Province: Kenema, Kono, Kailahun
- Southern Province: Bo, Bonthe, Pujehun and Moyamba
- Western Area: Urban and Rural

Table 5.1 Districts by Province and Number of Chiefdoms

Administrative Division	Area sq. Kilometers	Administrative Capital	Population inhabitants	No. of Chiefdoms
Northern Province	35,936	Makeni		53
Bombali				13
Kambia				7
Koinadugu				11
Port Loko				11
Tonkolili				11
Eastern Province	15,553	Kenema		44
Kailahun				14
Kenema				16
Kono				14
Southern Province	19,694	Bo		52
Bo				15
Bonthe				11
Moyamba				14
Pujehun				12
Sherbro Urban				-
Western Area	557	Freetown	1,447,271	-
Freetown				-
Western Rural Area				-
Total Sierra Leone	71,740	Freetown	6.092 million	149

Sierra Leone Social Studies Atlas, 3rd Edition. MacMillan 2014. Population (2008) and WB 2013.

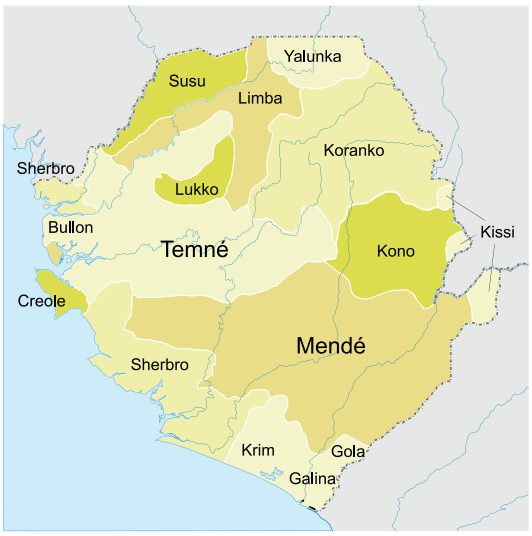


Figure 5.2 Map of Main Ethnic Groups
Wikipedia

There are sixteen main ethnic groups in Sierra Leone, each with their own language and customs. The two largest and most influential are the Temne and the Mende people. The first live in the north and the Mende are living in the south-east part. Although English is the official language in schools and public administration, Krio is the most widely spoken language in the country and unites all the ethnic groups.

5.1.2 The Ebola Virus Disease Emergency in Sierra Leone

The most widespread epidemic in history of Ebola Virus Disease (EVD) known as Ebola was ongoing in 2014 in three Western African countries of Sierra Leone, Liberia and Guinea, where it started in December 2013 and ended 2015.

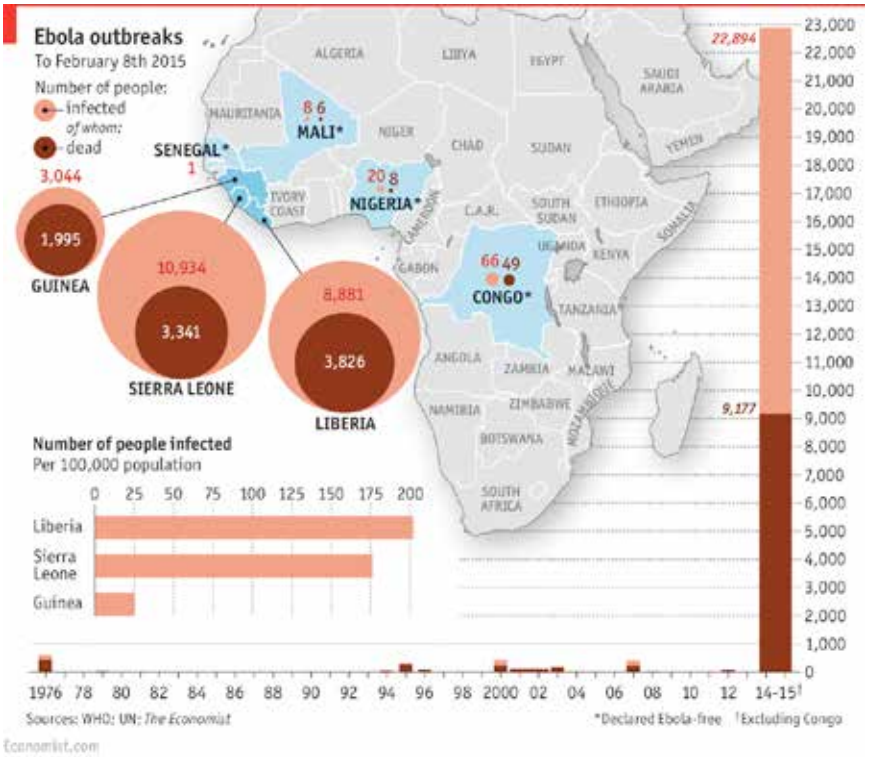


Figure 5.3 Ebola Outbreaks until February 8th 2015.
The Economist.

The first reported case in the Ebola outbreak was in Guéckédou, a forest area of Guinea near the border with Liberia and Sierra Leone. Travelers took it across the border and by the end of June, 759 people had been infected and 467 died from the disease, making this the worst ever Ebola outbreak.

The numbers kept climbing as of February 8th 2015, when 22,894 cases and 9,177 deaths were reported, the vast majority of them in these three countries[7].

The government of Sierra Leone declared on 31/03/2014 no cases in the country. However, the epidemic started in Kailahun district in May. Between 27th and 30th of May the number of confirmed and suspected cases went from 16 to 50 in this district, where the disease extended rapidly and the local public hospital was overwhelmed. The first case in the capital Freetown was reported on July 11, 2014.

It is alleged to have increased the lethal effects of the Ebola the involved funeral practices, when the virus had high concentrations in the dead bodies. For example hugs, rubbing the corpses down with oil and dressing them were among the most dangerous practices.

As of 14 March 2015, the World Health Organization (WHO) reported a total of 24,632 suspected cases and 10,159 deaths.

Figure 5.4 Map of the Ebola affected Areas in West Africa.
World Health Organization Report.

[7] The toll of a tragedy Feb 12th 2015, 13:01 by The Data Team. The Economist.

Table 5.2 Number of Suspected Cases and Deaths

Country	Suspected Cases	Deaths	Last update	Country info
Guinea	3,373	2,216	14/03/2015	
Liberia	9,482	4,241	12/03/2015	
Sierra Leone	11,742	3,687	14/03/2015	3,321 deaths/8,484 confirmed cases
Total	24,597	10,144		

The number of the 2nd column is a total of all suspected, probable and confirmed cases. In other countries with short outbreaks the numbers were very low like 8/20 in Nigeria, 6/8 Mali and 0/1 in Senegal.
Adapted from Wikipedia, EVD in West Africa. And for Sierra Leone the Daily Ebola Situation Report of the Ministry of Health and Sanitation.

5.2 Preparation for Monitoring the Humanitarian Performance

The Ebola Virus Disease (EVD) has disrupted the livelihood of families in the country, so much that 1,000,000 children were out of school for more than seven months, the health system was overwhelmed by the outbreak at district and local community levels, the main industries like mining closed their sites leaving workers without regular income, and thousands of children were direct affected by the dead of one or both parents.

The international organizations responded to the call of the government of Sierra Leone to support the affected families and the emergency in the country. The United Nations Children's Fund (UNICEF) supported the Government of Sierra Leone since the beginning of the outbreak in Health, Nutrition, Water-Sanitation-Hygiene, Child Protection, Social Mobilization, Education and the areas of Community Care Centers and Social Protection.

As explained in Chapter 2, the Humanitarian Performance Monitoring (HPM) toolkit was developed in 2010 by the team of UNICEF based on the Core Commitments for Children in Humanitarian Action to improve the results of the humanitarian aid in disasters.

HPM was based, as Figure 5.5 shows on the Situation Report (SitRep), on 2-3 key program indicators by sector reported by partners with high frequency (at least every month) and program quality plus cluster coordination.

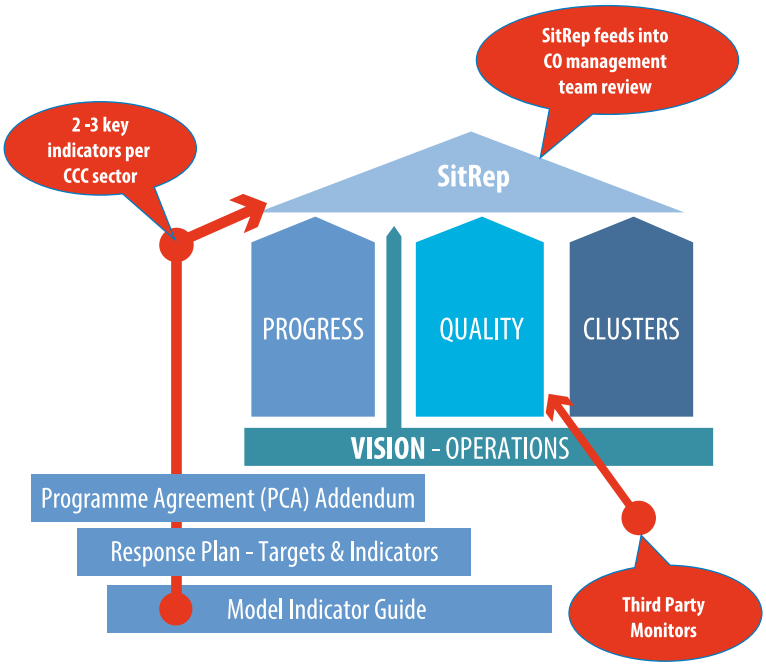


Figure 5.5 Monitoring Basics for Humanitarian Emergencies
Improved version of the Humanitarian Performance Monitoring toolkit UNICEF, 2012.

5.2.1 The Humanitarian Performance Monitoring System

The stages of planning and field monitoring of the method Project Planning, Monitoring, Systematizing and Learning could be applied in this case to support the Humanitarian Performance Monitoring tasks.

First, the static databases (DB) were prepared in consultation with the Monitoring & Evaluation team and after a first visit to the field.

The next Table is a short list of the DBs and reports used during the Ebola emergency.

Table 5.3 Summary of Databases and Reports

Static DB	Dynamic DB	Reports
• Geo-population list/Map, • Table of Results, • List of Indicators (standards) by sector, • Time plan, • Questionnaire for Centres	• Data Summary • Outputs - Outcomes • Qualification of Results	• by location • by Sector and Indicator • Conclusions and Recommendations

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

The humanitarian community worked in emergencies guided by the humanitarian standards, approved by all countries and organizations like the Sphere Project[8] and the internal standards of every organization e.g. the CCC[9] of UNICEF. The next pages show how the tools of the static and dynamic databases of the method for Project Planning, Monitoring, Systematizing and Learning were useful and helped to prepare the reports for management and stakeholders to make opportune and appropriate decisions with a higher frequency.

5.2.2 Static Databases

The list of proxy-indicators of Annex 2, which was recommended by the UNICEF team for implementing the Humanitarian Performance Monitoring (HPM) in large emergencies was the first source for organizing the performance monitoring. The list of Objective Verifiable Indicators (OVI) included the sectors of Education, Water-Sanitation-Hygiene, Nutrition and Child Protection and Health plus Operation of Community Care Centers which had been implemented in Sierra Leone in coordination with the United Nations and the Ministry of Health. This list of OVIs served to discuss with the heads of sectors the places of the health care centers to be monitored.

The table in Annex 2 displays besides the list of the humanitarian indicators also the way how the calculation of the indicators was recommended.

The other static databases of the list and location of Centers to be monitored and the Time plan for the emergency in Sierra Leone are displayed in section 5.3.1 and Annex 2.

[8] The Sphere Project is a manual that contains the standards to serve affected people in emergencies on the areas of Nutrition – Food security, WASH, Shelter, and Health rounded out with transversal themes. It has been published since 1997 as an initiative of large international NGOs supported by several European, Australian and American governments.

[9] The UN Agencies have also a specific manual with humanitarian standards that complement the Sphere Project in those areas that the agencies have their expertise, as for example the Core Commitments for Children in Humanitarian Action from UNICEF in the areas of Child Rights, Education, etc.

5.2.3 Dynamic Databases of Results

The main dynamic databases for calculating the results were organized in 3 matrixes:

- Summary table for loading the collected data by Health Center and Care Center.

This table was organized in six blocks to download the collected information:

  - The general information of the Center and the person in charge to provide the main information during the visit. A questionnaire was prepared with the corresponding questions to facilitate the collection of data.
  - The population data (families, persons and children by bracket age).
  - The information of the nutrition supplies provided to patients.
  - The information on water supply, toilet availability and hygiene promotion activities plus cleanness of the sites with center personnel and temporary patients.
  - The section for the information of school children back in school activities was ready for the moment that schools would be reopened.
  - The last block included the information of Child Protection activities like Child Friendly Space, Psycho Social Support program and about separated and reunified children.

- Matrix of outputs and outcomes.

This matrix calculated the values of the indicators in the Centers for each sector to see how much was achieved in relation to the target or the standard, what sector was in deficit of some supplies and also the general status of the project e.g. water supply per person or quantity of persons per toilet. The values of targets or standards were at the top of the table.

The table was built in one page with 7 blocks, one for the location, one for the population in the Center and one for the five sectors.

- Matrix for qualification of outputs-outcomes.

The qualification matrix compared the calculated indicators of the previous table with the standards or targets and qualified the advance of the indicator with a rank from 1 to 5 according to how good (5) or low (1) the indicator had advanced.

For facilitating this step, the ranges of targets and standards were disaggregated as explained in chapter 3 in five intervals, and each interval was given a qualification and a color as follows: Very good 5 (green), Good 4 (yellow), Regular 3 (purple), Low 2 (orange) and Very low 1 (red). In order to facilitate the analysis of this matrix and the feedback from different stakeholders it was convenient to color the qualification grades.

- Systematization Curves

The Sys-Curves of the main indicators were included lately following the method of Project Planning, Monitoring, Systematizing and Learning, so that the monitoring officer and the surge team would have in the future completed tools for analysis, and appropriate and opportune reports to personnel in the Centers and management for feedback, learning and necessary adjustment of the humanitarian performance. The Sys-Curves were implemented within the Excel formats of the dynamic databases.

5.2.4 Types of Reports: by Site, by Sector and Conclusions-Recommendations

After the visits to the Care Centers and based on the tables of results the report on the humanitarian performance was prepared with information of each sector:

- The Summary of Main Findings by Center: This table had three columns; the first with the name of the visited center, the second with a summary of the indicators by sector and the last column with remarks. Here, the main achievements and important weaknesses were explained for improvement.
- Based on the Summary table a 2nd report table was arranged for Analysis by Program Sector with the indicators in the first column and the sector analysis in the second.

- Finally, the Conclusions and Recommendations were set using the two table reports.

  The complete short report was sent to the Surge team and the Monitoring & Evaluation (M&E) team, explaining to the heads of sectors those urgent issues to be addressed by the program field teams and giving feedback to the community centers for necessary improvements.

5.3 The Monitoring Strategy and its Implementation in Sierra Leone

The following monitoring strategy was proposed to follow the next steps:

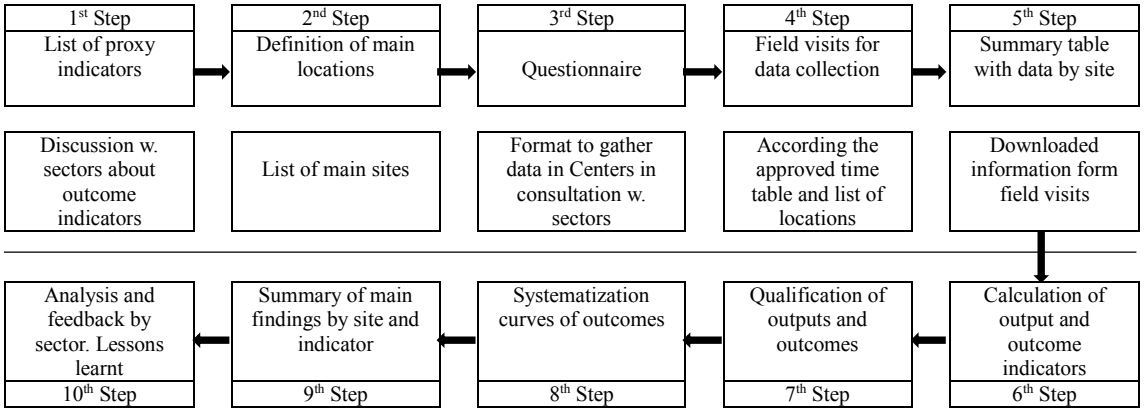


Figure 5.6 Schema of the Monitoring Strategy in Sierra Leone.
Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015

- The 1st step was the discussion with the Heads of Sectors about the "List of approved Results" and the Humanitarian Performance Monitoring Proxy indicators to be monitored in the field. These meetings took place the first week after arriving in Freetown. The programs of Health and Child Protection and the area of Community Care Centers provided lists of attended centers.
- In the 2nd step the locations of the centers to monitor were decided with help of the heads of sectors and the M&E team. For this, meetings were held in the second week in the sub-offices of Kenema and Makeni to visit with field officers affected centers supported by UNICEF.
- After the first activities a time plan and a questionnaire (step 3) were prepared for gathering information of the indicators on the field (step 4).

- Three monitoring visits (step 5) were done to the districts of Makeni, Tonkolili and Western Area and two to Kono in the periods of January-February, March-April and in May 2015.
- The dynamic databases were calculated in steps 6 and 7 plus the reports prepared for the sectors and the Monitoring & Evaluation (M&E) team in step 9. The step 8 for the elaboration of the Systematization Curves was added here to improve the analysis and the reports.
- Finally in step 10, the results were informed to the M&E team, discussed with the heads of sectors for analysis of difficulties and possible solutions and feedback was provided to the community care centers for monitoring the solutions and empowering the leaders and field teams.

5.3.1 The Static Databases in the Ebola Emergency in Sierra Leone

The tables 5.4 and 5.6 included the list of health and care centers, selected with the heads of programs plus the periods for the field visits. So that the officers on the field would know in advance about the monitoring plan.

Table 5.4 Sites for Monitoring Visits

Name of Center	Location	District	Type of Center	Remark
ICC Maboka	Maboka	Bombali	Orphan Center	Public institution
OICC Makeni	Makeni	Bombali	Observation interim Center	Public institution managed by a counterpart
CCC Robies	Robies	Tonkolili	Community Care Center	Built and supported by UNICEF
CCC Mayagba	Mayagba	Bombali	Community Care Center	
CCC Matotoka	Matotoka	Tonkolili	Community Care Center	
OICC Magburak	Magburak	Tonkolili	Observation interim Center	Public institution managed by a counterpart
OICC Koidu	Koidu	Kono	Observation interim Center	Public institution managed by a counterpart
CCC Fiama	Fiama	Kono	Community Care Center	Built and supported by UNICEF
CCC Kundama	Kundama	Kono	Community Care Center	
CCC Hamilton	Hamilton	Western Area	Community Care Center	
CCC Newton	Newton	Western Area	Community Care Center	

Adapted from the Final Mission Report in Sierra Leone, Guachalla, 2015

The next table contained the periods for the field visits and this information was shared with the sectors, field teams and community care centers.

Table 5.5 Periods and Centers by District for Monitoring Field Visits

Periods of visits	Bombali-Makeni	Tonkolili	W. Area	Kono
16-19.12.14 + 08.01.15	OICC Makeni (4)	OICC Magburaka (4)	Hamilton CCC (3)	
26-31.01 + 06.02.15	Mayagba CCC (2)	Robies CCC (3)	Newton CCC (3)	OICC Koidu (2)
23-26.03 + 02.04.15	Arab hospital HC (2)	Matotoka CCC (2)		Fiama CCC (2)
04-06.05.15	Kamabai CCC (1)	ICC FHM Maboka (4)		Kondama CCC (2)
	Patebana CCC (1)	Mamansonka CCC (1)		Gandorhun CCC (1)

The numbers in parenthesis were the number of visits to each Centre.
Adapted from the Final Mission Report in Sierra Leone, Guachalla, 2015

The field monitoring visits were adapted to the emergent situation in consultation with the surge team as recommended in Chapter 2 by Patton and Rogers (2012).

The Children Care Centers were the Observation Interim Care Center (OICC) established by counterparts during the Ebola emergency to observe children that had been in contact with sick people and the existing Interim Care Centers (ICC) organized by the Ministry of Social Welfare before the outbreak to support orphans and to reunified them with caregivers. The Community Care Centers were temporally occupied by both adults and children if necessary.

Since the beginning of the emergency the programs had used a general list of Results (Table 5.6) defined by the humanitarian institutions and the Ministries of the areas and a list of indicators (Table 5.7), to be reported every week with the weekly Situational Report.

The Table 5.7 was prepared and reported by the counterparts and facilitated by the information officer of each sector to the Monitoring & Evaluation officer to be consolidated and sent to the Deputy of the Regional Office for further merging with the information of the other countries affected with the Ebola outbreak and distributed to the Headquarters in New York with the weekly situational report.

Table 5.6 List of Program Results of the Humanitarian Aid

PROGRAM RESULTS TABLE FOR HPM PURPOSES

No.	INDICATOR	SECTOR	DEFINITION	COMMENT	UNICEF		MAIN CRITERIA			
					UNICEF Target	DEFINITION				
	Health structures in EVD affected areas provided with essential commodities package	Health			1.185	# of health struct.w.essential package / total # of health structures in affected areas				
9	Percentage of all ebola community treatment and holding centres with essential WASH services	WASH	Numerator: # of Ebola community, treatment and holding centers with essential WASH services Denominator: total # Ebola community, treatment and holding centers	Important to note this includes CCCs, ETUs and CTCs. Essential WASH services to be defined by WASH team according to guidelines for IPC and WASH standards established in each country, unless set across all countries.	22 to 48	Numerator: # of Ebola community, treatment and holding centers with essential WASH services Denominator: total # Ebola community, treatment and holding centers	Water Quant (70-240 l/d/b)- Qual (.2-.4 Chlorine ppt) provided to Centers	Sanitation service: 1 Latrine and 1 Shower / Center	Sewage water drenage and soak pit	Waste pit facility
12	Percentage of patients admitted to CCCs who are tested for EVD infection and whose test result is available within 36 hrs	Health	Numerator – # of CCC patients admitted who are both tested and whose result is available within 36 hours Denominator - # of patients admitted	Acknowledges current unavailability of a rapid test.			# admited / total presented	# tested / # presented		# of hours to get the test result
	Treatment centres providing nutrition support to Ebola patients	Nutrition			30 to 47	# centres w.nutrition support / total treatment Centres	# of holding Centers			
	Children 6-59 months screened for SAM and referred for treatment				70%	# of children SAM in treatment / total children SAM	Cured SAM children			
	Radio Lesson Listenership Coverage during EREP monitoring	Education			100%	# of primary school children listening / total primary school children or LQS method applied	19 HH for LSQ			
10	Percentage of EVD-affected children provided with care and support, including psychosocial support	Child Protection	Numerator – # of EVD-affected children provided with care and support, including psychosocial support. Denominator: All children estimated to be affected by EVD	Age (0-17 years), and "psychosocial support" definitions to be decided/provided Assumes ability to track children affected by parents' illness but not presenting at the treatment unit.	150	Numerator – # of EVD-affected children provided with care and support, including psychosocial support. Denominator: All children estimated to be affected by EVD	# of children with PSS and # of CFS providing PSS			
11	Percentage of children who have lost one or both parents/caregivers or who are separated from their parents/caregivers reintegrated with their families or provided with appropriate alternative care.		Numerator – # of children reintegrated with their families and # of children provided with needed appropriate alternative care. Denominator: All children children who have lost one or both parents/caregivers or have been separated from their parents/caregivers	Age and "appropriate alternative care" definitions to be decided/provided. Assumes ability to track children affected by parents' illness but not presenting at the treatment unit.	10	Numerator – # of children reintegrated with their families and # of children provided with needed appropriate alternative care. Denominator: All children who have lost or separated from one or both parents/caregivers	# of children reunified w.care givers			
3	Percentage of District Social Mobilization taskforces (SMT) reporting on the dashboard each week	C4D	Numerator: # of units with SMT reporting on the dashboard each week. Denominator: # of units with SMT forces	The assumption is that reporting task forces are functional and effective. However, TF might not reporting but are effective in mobilizing their community…..	14	of UNICEF (UNMEER)	# leaders promoting/ # leaders	# chiefdoms w. incident / # chiefdoms	# of patient presented in 48 hrs / total of coming people	# radios airing daily messages /total radio stations (district)
7	Percentage of CCCs functional against target set for the current reporting period	CCC	Numerator: #CCCs (funtional) => functioning Denominator: #CCCs scheduled to be functioning each week (this will change depending on current targets)	Target may vary as epidemic evolves. "Functional" means having staff and capacity to treat isolated patients.	40 to 200		Delivered essential health package	Delivered WASH services	Delivered Nutrition supplementary support	

Adapted from the Final Mission Report in Sierra Leone, Guachalla 2015.

Table 5.7 Example of the Humanitarian Performance Monitoring List for Weekly Reports

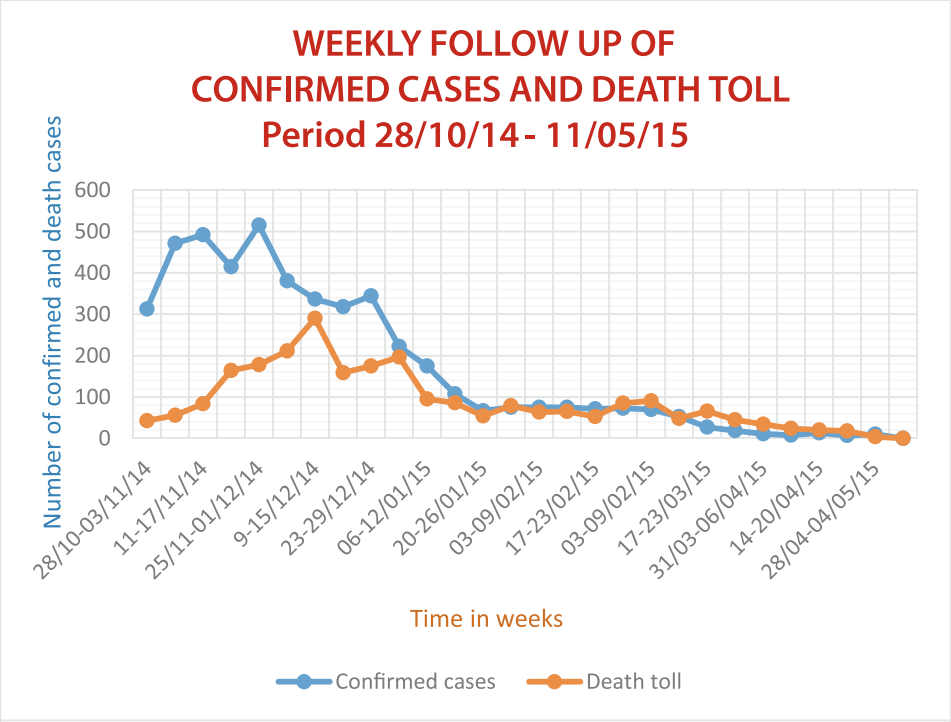
Program Results (Period 31/03 – 06/04/2015)

UNICEF and Pillar/Sector Results for EVD response (08 April 2015)				
Indicators	Pillar / Sector		UNICEF	
	Target	Results	Target	Results
EPIDEMIOLOGY				
Percentage of EVD cases with onset in the past week	0%	0.13% (11/8,558)		
COMMUNICATION FOR DEVELOPMENT				
Percentage of District Social Mobilization Taskforces (SMT) reporting on the dashboard each week (UNMEER)	100% (14)	21% (3/14)	100% (14)	21% (3/14)
Percentage of districts with list of identified key religious leaders (including priests, imams, pastors, tribal leaders) or community groups who promote safe funeral and burial practices according to standard guidelines (UNMEER)	100% (14)	100% (14/14)	100% (14)	100% (14/14)
Percentage of districts with at least one security incident or other form of refusal to cooperate in the past week (UNMEER)	0% (0)	0% (0/14)	0% (0)	0% (0/14)
Radio stations airing daily messages on Ebola	100% (64)	97% (62/64)	100% (64)	97% (62/64)
Districts where all radio stations air Ebola content every day	100% (14)	100% (14/14)	100% (14)	100% (14/14)
Households receiving Inter-Personal Communication on Ebola prevention messages (on a quarterly basis)	100% (886,480)	118% (1, 053,517/ 886,480)	60% (532,000)	154% (818, 323/ 532,000)
CCC				
Percentage of CCCs functional against target set for the current reporting period (UNMEER)	100% (43)	100% (43/43)	100% (31)	100% (31/31)
Percentage of CCCs established after a community dialogue process aligned with Global SOPs or according to norms established in country (UNMEER)	100% (58)	100% (58/58)	100% (46)	100% (46/46)
Percentage of patients admitted to CCCs with a provisional diagnosis of possible EVD who received a confirmatory positive or negative test (rapid or laboratory test) within 48 hours of admission to treatment facility	100%	54% (6/11)	100%	54% (6/11)
Percentage of admitted patients who present at a CCC within 48 hours of becoming ill with any symptoms that could be EVD (UNMEER)	100%	25% (4/16)	100%	25% (4/16)
WASH				
Percentage of all Ebola community treatment and holding centers with essential WASH services	100% (94)	72% (69/94)	100% (52)	69% (36/52)
CCCs provided with essential WASH services	100% (58)	100% (58/58)	100% (46)	100% (46/46)
Non-Ebola health centers in Ebola-affected areas provided with hand-washing stations	100% (1,162)	100% (1,162/1,162)	100% (1,162)	100% (1,162/1,162)
People in quarantine households receiving WASH support (as part of "home protection and support" kit)	100% (420,000)	16% (66,295/420,000)	100% (420,000)	16% (66,295/420,0 00)
CHILD PROTECTION				
Percentage of EVD-affected children provided with care and support, including psychosocial support	100%	84%		
Percentage of children who have lost one or both parents/caregivers or who are separated from their parents/caregivers reintegrated with their families or provided with appropriate alternative care	100%	75% (1,839/2466)		
EVD-affected children provided with psychosocial support	100% (13,057)	84% (11,002/13,057)	100% (13,057)	84% (11,002/13,05 7)
EVD-affected caregivers provided with psychosocial support	75% (15,000)	69% (10,416/15,000)	75% (15,000)	69% (10,416/15,00 0)
EVD-affected children placed in interim care	TBD	1023	TBD	1023
EVD-affected children reunified with their families	TBD	1,845	TBD	1,845
EVD-affected children and adult survivors who receive non-food items	100% (13,281)	75% (10,013/13,281)	100% (13,281)	75% (10,013/13,28 1)
HEALTH				
Health structures in EVD affected areas provided with essential commodities package	100% (1,185)	101% (1,195/1,185)	100% (1,185)	101% (1,195/1,185)

Health personnel in health facilities trained in infection prevention and control and Ebola triage	100% (2000)	218% (4,368/2,000)	100% (2000)	218% (4,368/2,000)
Community Health Workers (CHW) trained on revised guidelines on provision of community-based maternal, new-born and child health (MNCH) care	100% (6,000)	141% (8,495/6,000)	100% (6,000)	141% (8,495/6,000)
HIV AIDS				
HIV positive women (including pregnant women) continuing to receive ARTs	NA	NA	100% (1,142)	80% (916/1,142)
HIV positive children continuing to receive ARTs	NA	NA	100% (539)	56% (300/539)
NUTRITION				
Treatment centers providing nutrition support to Ebola patients	100% (150)	84.7% (127/150)	100% (150)	84.7% (127/150)
Children 6-59 months screened for SAM and referred for treatment	70% (18,885)	160.7% (30,349/18,885)	70% (18,885)	160.7% (30,349/18,885)
EDUCATION				
Radio Lesson Listenership Coverage during EREP monitoring	100%	52.3% (507/969)	100%	52.3% (507/969)
Teachers trained on psychosocial support, Ebola prevention, and safe and protective learning environments	7,000	92% (6,443/7,000)	7,000	92% (6,443/7,000)
Radio stations broadcasting emergency learning programs	100% (41)	100% (41/41)	100% (41)	100% (41/41)
SOCIAL PROTECTION				
Extremely poor households directly affected by the EVD that receive a cash transfer through the national safety net program	9,000	92% (8,280/9,000)	NA	NA

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

Based on the weekly information of the Ministry of Health (first indicator of Table 5.8) the following diagram showed the development of the Ebola epidemic in Sierra Leone:



Period	Confirmed cases	Death toll
21-27/10/14	418	51
28/10-03/11/14	313	43
04-10/11/14	471	56
11-17/11/14	492	84
18-24/11/14	415	164
25/11-01/12/14	515	178
2-8/12/14	381	211
9-15/12/14	337	290
16-22/12/14	318	159
23-29/12/14	344	175
30/12-05/01/15	222	197
06-12/01/15	175	95
13-19/01/15	108	86
20-26/01/15	67	54
27/01-02/02/15	75	79
03-09/02/15	75	64
10-16/02/15	75	65
17-23/02/15	71	53
24/02-02/03/15	73	85
03-09/02/15	70	91
10-16/03/15	53	48
17-23/03/15	27	66
24-30/03/15	19	45
31/03-06/04/15	11	34
07-13/04/15	8	24
21-27/04/15	7	18
28/04-04/05/15	10	4
05-11/05/15	0	0

Figure 5.7 The Ebola Outbreak in Numbers.
Adapted from the Final Mission Report in Sierra Leone based on SitRep Vols. of MoH. Guachalla, 2015.

The following important numbers were found from the analysis of the information of the period since the last week in October 2014 until the second week in May 2015:

- The highest number of confirmed Ebola Virus Diseases (EVD) cases in a week was 515 in the last week of November 2014 (25.11-01.12.2014).
- The highest number of death toll in a week was 290 between 9-15.12.2014
- The lowest number of weekly Ebola confirmed cases and death toll was recorded from 05-11.05.2015 with 0 confirmed and dead cases.
- While on a daily basis, the highest number of EVD confirmed cases was 111 on 8.11.2014 and one month later, the number of 52 deaths was the highest.
- The lowest number of Ebola confirmed and deaths is "0" given for the first time on 19.03.2015 for confirmed cases and on 15.04.2015 for number of deaths.

According to international standards, the country had to count 42 consecutive days (6 consecutive weeks) of "0" Ebola confirmed cases, in order to be declared "free of EVD epidemic" what has taken a large effort from the whole country and the international community until October 2015, when Sierra Leone accomplished that requisite.

The table in Annex 2 contains the first Time plan discussed with the Monitoring & Evaluation (M&E) team and the heads of programs, which finally evolved to the final list of sites in the Tables 5.4 and 5.5.

The method was presented to the team of the M&E area in a short workshop early January and also to the Field Support Officers (FSO) of the districts of Kenema, Kono, Tonkolili and Makeni.

The hands-on training of the FSOs included first the collection of data with the questionnaire, then in the second visit the collection and downloading the field data into the Summary table and in the 3rd visit the use of the ODK application with cellphones for expediting the collection and transference of data from the health centers to the main office. During the last training, the FSOs learned also the use of the table for calculating the indicators of outputs and outcomes.

Table 5.8 Questionnaire

QUESTIONNAIRE TO ASSESS THE HUMANITARIAN RESULTS BASED MONITORING

Place of interview: _____ Date ___/___/___ Hour: _____ (am or pm)

Name and position of the person who fills the form: _____

Name, institution and position of the interviwed persons (if possible Cellphone or e-mail):

1 _____

2 _____

3 _____

1. LOCATION INFORMATION AND ITS TOTAL POPULATION:

1.1 Location: _____ Total Village: _____ inhabitants Total Village: _____ families

1.2 City: _____ Total women: _____ women Total men: _____ men

2. INFORMACIÓN ABOUT THE AFFECTED POPULATION AND THE SUPPORT PERSONNEL:

2.1 **TOTAL patientes in the Centre (in OICC-CCC-HC):**

		persons:	totals
SECTOR:	WASH →		↓
Primarily	Lactants	girls of 0-6 months a	
		boys 0-6 mo.	0
	Nutrition	girls of 6-24 mo. and	
		boys 6-24mo.	0
	Early childhood	girls of 2-5 years and	
		boys 2-5 yr.	0
	School children	girls of 6-13 years an	
		boys 6-13 yr.	0
	Adoles-cents	young women and	
		young men	0
	Total 0 - 17 years:		0

SUMMARY INFORMATION:

0 to 17 years		
Total children:		children
Total girls:		girls
Total boys:		boys
18 to 59 years		
Total adults:		adults
Total women:		women
Total men:		men
population:		persons

SUMMARY INFORMATION ABOUT THE STAFF IN THE CENTRE:

Total Nurses:		nurses
Supervisors:		staff
Security:		staff
Cleaners:		staff
Sprayers:		staff
Others:		staff

2.2	18 - 59 years	women		above 60 years	
	18 - 59 years	men	0	Total alderly:	alderly
	elderly women > 60	women		Total women:	women
	elderly men > 60	men	0	Total men:	men

NGO:	persons
Partner:	persons
Total Personnel:	persons

2.3 OTHER VULNERABLE POPULATION:

2.3.1 total # of pregnant women: _____ pregnant 2.3.3 # total persons with other capacities: _____

2.3.2 total # of lactating women: _____ lactating 2.3.4 # of children with other capacities: _____

3. INFORMATION ON NUTRITION:

3.1 Are pacients receiving supplementary food in the Centre? (e.g. BP 100 or Therapeutic milk & food)

_____ yes _____ no

3.2 How many patients have received it the last week? _____ patients

3.3 Do you have enough supplementary food for the next week? _____ y/n

3.4 **Total # of screned children 6-59 mo?** _____ children

3.5 # children 6-59 mo with SAM enrolled or admitted in TFP?

	SAM girls	boys	total
children 6-59 mo		SAM	

3.5.1 **Exit of TFP** No. children: recovered _____ defaulted _____ dead _____

3.6 Have they received Plumpy-Nut? _____ y/n or other kind of Therapeutic food? _____

3.6.1 if yes: how many doces? _____ 3.6.2 when was the last time? _____ 3.6.3 Micronutrients: _____ y/n

4. INFORMATION ON HEALTH:

4.1 How many patients were last week in the Centre? _____ patients

4.2 # of patients, who received their EVD-test results within 36 hours? _____ patients received their EVD-test within 36 hours

4.3 Type of essential health package in the Centre: 4.3.1 Was it sufficient to attend the patients? _____

for _____: _____ 4.3.2 Do you have sufficient for next week? _____

if not what are the needs on essential package for next week? _____

The main areas of the questionnaire for data collection were the population, questions on nutrition, health, Water-Sanitation-Hygiene and Child Protection and little on Education because schools were closed.

2nd page of questionnaire:

5. INFORMATION OF WATER - SANITATION - HYGIENE:

5.1 Would you please explain how is **water supplied** to the Centre? _____

a) Total volumen of storage capacity: _____ liters or m3 # of tanks? _____ e.g. 2 tanks x 2m3 + 1 bladder 10m3 = 14 m3

How they fill the water tanks daily? _____

c) own well? _____ y/n water taps? _____ y/n

5.2 How the centre is provided with water for drinking? _____

a) drinking water: _____ bottles/person d1) frequency: _____ times/week d2) Who deliveres it?

5.3 Use of **toilets** in the Centre	Women	Man	Total	5.3.1 and **showers?**	Women	Man	Total	Any WASH issue reported:
No. of latrines for patients								
No. of latrines for workers								
Total available toilets				Total showrs.				

5.4 Has the Centre a drainage system? _____ (y/n) 5.4.1 with Soak pit? _____ (y/n)

5.5 Has the Centre a waste/garbage pit? _____ (y/n)

5.6 In terms of water quality, are you chlorinating water? _____ y/n 5.6.1 with 0.05 and 0.5 % chlorine? _____ y/n

5.6.2 Do you have enough chlorine for the next week? _____ y/n

5.7 Are people washing their hands? (w. soap?) _____ y/n 5.7.1 when? B / A / B

5.7.2 Have hygiene promotion activities been held w/patients and families as well? _____ y/n

6. INFORMATION ON CHILD PROTECTION:

6.1 How many children were in the Centre last week? _____ children 6.1.1 Girls-Boys _____ + _____ =

6.2 Have they all received Psycho Social Support (PSS)? _____ children in a psycho social support programme

5.2.1 Girls + Boys _____ + _____ = _____ Girls-Boys in a psycho social support programme

6.3 # of trained personnel working in Centre? _____ trained persons in PSS 6.3.1 # of volunteers in Centre? _____

6.4 # of children reunified with care givers? _____ 6.4.1 total # of orphans identified since beginning of crisis _____

7. INFORMATION ON EDUCATION: **Before EVD emergency:** Total # of pupils enrolled and teachers:

7.1 Name of the Elementary school? _____ Name of the Principal: _____ 7.1.1 Pupils: Elem.school _____ + Pre-school _____ Teachers: +

7.2 How many school children (girls-boys) have returned to school?

No.teachers			No. of school children		
#classrooms	Girls	Boys	Girls	Boys	total

7.2.1 Total of teachers & children affected in Elem. School?

Girls Boys

Children _____ _____

Teachers _____ _____

7.2.2 School materials delivered for school children and teachers: _____ backpacks & _____ teaching kits 7.3 OSCY

7.4 How many of children have returned to the Pre-School or DCC?

No. Workers			No. of Pre-school or DCC...		
#classrooms	women	men	girls	boys	total

7.4.1 No.of workers & children affected in Pre-School or DCC?

Girls Boys

Children _____ _____

Workers _____ _____

7.5 Does the school children are listening to the radio lessons in town? _____ 7.5.1 if yes How many? _____

8. INFORMATION ON SOCIAL MOBILIZATION (C4D) (questions for the SM Pillar):

8.1 Has the SM Task Force reported on the Dashboard last week? _____ y/n

8.2 How many radios are airing at least 3 times daily messages on Ebola? _____ radios

8.3 How many households have received last week an interpersonal communication on ebola prevention? _____ households

End of the interview: _____ hrs.

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

5.3.2 Dynamic Databases in the Ebola Emergency in Sierra Leone

The data gathered with the questionnaire in the Care Centers were downloaded and served to calculate and qualified the indicators as follows:

- The Summary Field Information table contained the numerical information of the centers for each sector. It was divided in seven parts. The first for the general information of the sites, plus the population in the centers. The next areas had the information of the sectors: Health, Nutrition, Water-Sanitation-Hygiene (WASH), Education and Child Protection.
- The table for the calculation of the Output-Outcome was similar but much shorter, because it only contained the columns of the calculate values of the indicators for each sector: Health (2), Nutrition (1), WASH (5), Education (1) and Child Protection (3).
- Finally the Qualification table contained the qualifications of the indicators according to the ranking based on the standards used for each sector. The qualification was done agreeing with the explanations in Section 5.2.1 and chapter 3 (Section 3.2.2).

The values of the indicators were calculated in table 5.10 according to the List of Proxy-indicators. The standards for the qualification of the indicators are copied in next table.

Table 5.9 Ranges and Ranks for Qualifying the Results

Health		Nutrition	WASH					Education	Child Protection	
100%	100%	100%	50-200	l/b/d	5-10	pers/toilet		children listening to radio	PSSup.	100%
Medicines	tests in 36 hrs	Food supp.	10-100	l/p/d	Drainage-Soak pit		100%	100%	Psycho-so.supp.	
			hygiene awarareness		100%	waste pit	100%		100%	reunified

Medicines in Centre	Tests in 36 hrs.	Persons w. suppl.food	RANGE OF INDICATORS					RANGE OF INDICATORS			Performance range and Qualification	
			W.Spl	Toilet.	Shwer	d-sp	w-pit	listeners	Ch-PSS	reunifd.		
			l/p-b/d	p/t	p/sch	functioning		%	%	%		
>90%	< 24	>90%	>100	2:1	2:1	>90%	>90%	>90%	>90%	>90%	very good	5
70-90	36	70-90	50-100	5:1	5:1	70-90	70-90	70-90	70-90	70-90	good	4
50-70	36 - 48	50-70	25-50	10:1	10:1	50-70	50-70	50-70	50-70	50-70	regular	3
25-50	48 - 60	25-50	10-25	10-20:1	10-20:1	25-50	25-50	25-50	25-50	25-50	low	2
<25	> 60	<25	< 10	>20:1	>20:1	<25	<25	<25	<25	<25	very low	1

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

The value of the indicators were qualified between a range from 1 to 5 in Table 5.11 below according to the standards and targets of the project.

Table 5.10 Example of the Output-Outcome Calculation

Summary table of Outputs and Outcomes from visited Sites

VISITED SITES	SITE INFORMATION OF CENTRE MANAGER								Health		Nutrition	WASH					Education	CHILD PROTECTION	
	Persons		Affected children						Medicines in Centre	Test results in 36 hrs	Supplementary food support	Water Supply	Ratio persons/toilet	Ratio persons/shower	Drenage - Soak pit	Waste pit	Radio Listening	Children in PSS program	Reunified children w. Care givers
	patients	workers	0-6 m	6-24m	3-5 y	6-12 y	13-17 y	total											
	#	#	#	#	#	#	#	#	%	%	%	l/p/d	p/t	%	y/n	y/n	%	%	%
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
OICC Makeni	15	22	6	0	4	4	1	15			100%	41	7	6	yes	yes	100%	100,0%	100%
Kamabai CCC	0	16	0	0	0	0	0	0	0%	48	0%	94	3	3	yes	yes			
OICC Magburak	0	18	0	0	0	0	0	0			0%	111	3	3	yes	yes			100%
Robies CCC	2	23	0	0	0	0	0	0	100%		100%	60	5	5	yes	yes			
ICC FHM Maboka	1	6	1	0	0	0	0	1			100%	43	2	4	no	no			100%
Newton CCC	2	38	0	0	0	0	1	1	100%	24	100%	300	6	6	yes	yes			
Newton CCC 3	2	39	0	0	0	0	0	0	0%	24	0%	293	6	6	yes	yes			
Connaught Hospital (16)	0	0	0	0	0	0	0	0											
OICC Koidu	0	10	0	0	0	0	0	0	100%		100%	120	3	5	yes	yes			100%
CCC Fiama	0	28	0	0	0	0	0	0	100%	24	100%	54	6	6	no	yes			
CCC Kundama	1	32	0	0	0	0	1	1	100%		0%	30	33	33	no	yes			
Total or average:	23	232	7	0	4	4	3	18	71%	30	60%	114	7	8			100%	100%	100%

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

Table 5.11 Example of Qualified Results

Graded and qualified Outcomes achieved in visited Sites

Cod.	No.	VISITED SITES	Health		Nutrition	WASH					Education	CHILD PROTECTION	
			Medicines in Centre	Test results in 36 hrs	Supplementary food support	Water Supply	Ratio persons/toilet	Ratio persons/shower	Drenage - Soak pit	Waste pit	School children listening to radio lessons	Children in PSS program	Reunified children
			%	hr	%	l/p/d	p/t	y/n	y/n	y/n	%	%	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OICC	2	OICC Makeni			5	2	3	3				5	5
CCC	2	Kamabai CCC	1	3	1	4	4	4					
OICC	3	OICC Magburak			1	5	4	4					5
CCC	3	Robies CCC	5		5	3	4	4					
ICC	3	ICC FHM Maboka			5	2	5	4					5
CCC	4	Newton CCC	5	5	5	5	3	3					
CCC	4	Newton CCC 3	1	5	1	5	3	3					
HC	4	Connaught Hospital (16)					5						
OICC	5	OICC Koidu	5		5	5	4	4					5
CCC	5	CCC Fiama	5			3	3	3					
CCC	5	CCC Kundama	5		1	2	1	1					
Total EVD affected Centers visited sites:			3	4	3	5	3	3				5	5

Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015

5.3.3 Report Tables

It was verified first if the calculated output and outcome indicators were within the limits recommended by humanitarian standards and then how good the partners were approaching toward the goals or standards by the qualification of those indicators. Then an objective report was prepared and presented with the analysis and discussion of the tables to the heads of each sector, the field team and the community centers. The complete report contained three parts:

- A Summary of Main Findings about the Humanitarian Assistance Indicators, which summarized the results and a remark about the situation in each site and for each sector.

Table 5.12 Example of 1st Part: Report Table on Indicators by Site and Sector

SUMMARY OF MAIN FINDINGS ABOUT THE UNICEF HUMANITARIAN ASSISTANCE INDICATORS		
EVACUATION CENTER	**MAIN FINDINGS**	**REMARKS**
BOMBALI - MAKENI		
OICC Child Fund	Health: they don't have medicines	According to new comments they won't use medicines w.children.
	Nutrition: 100 % supp.food	there was enough BP100, therapeutic Milk, etc. for next week use
15 children	WASH: 41 l/b/d, 3 p/t, 3 p/sh, dr-sk.p yes, gp yes	Pump is now working
22 workers: care givers, cleaners, security	Education: all school children are listening the lessons	
	Child Protection: all children receive PSS, 100%, all children from previous groups were reunified	
TONKALILI		
OICC Magburak Child Fund	Health: 0	
	Nutrition: had supp.food but not using yet, 0 SAM	enough new packs. But not using yet.
5 children	WASH: 91 l/b/d, 4 p/t, 4 p/sh, dr-sk.p yes, gp in construction	
17 workers	Education: 0 % listeners	No radio
	Child Protection: 5 children counselling, 5 reunif.child 100 %	Needs strengthening in PSS (fill only a child file)
KONO		
Fiama CCC	Health: sufficient medicines and 36 hours for the test results	sufficient medicines for next week
	Nutrition: have supp.food but not using it yet	The water quantity can be short for a higher demand
0 children	WASH: 75 l/b/d, 4 p/t, 4 p/sh, dr-sk.p y, gp y	The number of latrines and showers is in general good but if the
0 patients	Education: no children	staff has only one toilette, the # of people/toilette can be high
Staff 32: nurses,	Child Protection: no children	They asked if they can get posters on Ebola for the entry
WESTERN AREA	Social Mobilization: __SMTF dashboard, ___ issues, ___% radios airing	
Newton CCC	Health: 36 hrs, w. essential health package of antibiotics	during the week in 36 hr but over the wkend not
	Nutrition: none % supp.food, none SAM	no support yet, the supplies are still in the district
10 patients in total	WASH: 171 l/b/d, 3 p/t, 3 p/sh, dr-sk.p _y_, gp _y_	in general the WASH essential service is in place and funtioning
1 child	Education: no children	no radio
22 (38) workers	Child Protection: no children	

The importance of the first short report lied on the information collected on the field and presented to each sector for their revision and the feedback with the corresponding field officer and the community for any necessary improvement. The next part of the report was:

- An Analysis by Program Sector and Indicator, which summarized the results by sector and main indicator.

Table 5.13 Example of 2nd Part: Report Table on the Analysis by Indicator and Sector

ANALYSIS BY PROGRAM SECTOR AND INDICATOR		
HEALTH		
H1	# and % of Centers provided with essential health support	8 out of 11 Centres (73%) had enough essential health support. 3 were running out of Parasetamol and Cfixcime or other essential medicine
H2	# of hours that EVD patients have their results available	8 out of 10 (80%) Centres received the sample test results within 24 to 36 hrs. 2 between 36 and 48 hrs.
WASH		
W2	# and/or % of Centers with access to 150 liters of water per bed per day	3 out of 16 (19%) Centers supplied water above 150 l/b/d while other 5 (31%) were supplying between 91-143 l/b/d and 8 (50%) were between 22-75 l/b/d, which needs to be improved.
W3	# and % of people living in faeces free environment AND # and % of people with access to appropriately designed toilets	10 out 15 Centers (67%) had an average of 2 to 4 people per toilette, while 5 (33%) were with more than 5 p/t
	Hand washing facility in toilets site	all visited toilets had washing facility
W4	Increase awarenes on hygiene habits	In all centers the hygiene and particularly the hand washing was an important subjet
W5	# and % of Centers provided with working drainage and soak pit.	14 out of 16 (88%) of visited Centres has appropriate drainage, soak pit and waste pit. Only the ICC in Tonkolili had none, and the Matotoka CCC needed a soakpit.
	# and % of Centers provided with working waste pit.	
NUTRITION:		
N1	# and % of patients in Centers w. supplementary feeding programme:	3 out of 13 (23%) had not received supplementary food yet (in W. Area), the rest 10 (77%) had received. 5 Centers had the supp.food but had not started using yet.
N2	# and/or % children 6-59 mo with SAM enrolled in TFP or community-based programmes or facilities	No child in the Centers was SAM
CHILD PROTECTION		
CP4	# and % of separated children in emergencies reunified	All children of the visited OICCs or ICCs were reunified.
CP6	# and % children enrolled in psycho-social activities	2 out 7 (29%) Centers (4 OICC+1 ICC and 2 CCC) were providing clear Psychosocial support to the children in the Center. The rest 5 (71%) were providing mainly counselling.
EDUCATION		
E2	# and % of school-aged children including adolescents reached by schools (including in schools in affected areas still functioning, re-opened schools and/or temporary facilities established)	Only in OICC and ICC children had the chance to listen the lessons in the radio (if a radio is available)
	% of teachers attending to returned children in the school activities	N/A

The last column of the 2nd part of the report contained a summary and analysis of each indicator. The final portion of the report contained:

- An Analysis of the Humanitarian Performance with conclusions and recommendations by Program Sector.

Table 5.14 Example of 3rd Part: Report Table of Conclusions and Recommendations

ANALYSIS OF THE HUMANITARIAN PERFORMANCE	
CONCLUSIONS	**RECOMMENDATIONS**
HEALTH: The reception of sample tests results depended from the hour when the patients was atteded. In general all visited Centers had enough essential medicines.	The samples were taken as soon as the Center called the Lab. It is recommended to supply with new medicines to those centers that have requeted.
NUTRITION: There was a clear improvement on the supplementary food supply to the EVD inpatients in the visited Centers	It is recommended to follow up the W. Area district to make sure that the CCCs receive the supplementary food provided by UNICEF.
WASH: All CCCs had complete WASH systems (with the exception of Matotoka where a soakpit was needed). But the water supply was not as much as the Center may need if 8 or 24 patients were in place. The number of latrines and showers in the CCC was very good for inpatients and short for the staff in particular in those CCCs with one toilette for them. The drinking water was ensured in all Centers by the partners or by the use of Aquatabs. Even the OICCs had good water supply. Only the number of toilettes and showers was not as good.	There is the need to follow up and strength the supply of water to all Centers and if possible to support the OICCs and ICC to improve the sanitation services.
EDUCATION: It was only in OICC and ICC possible to measure the number of children listening to the radio lessons. And they were doing so where a radio was available. The lack of radio in some of those Centers can be solved.	Because the Education sector is now getting into a new situation for reoppening the schools, there can not be given a recommendation now.
CHILD PROTECTION: Children in OICC were receiving PSSupport or counselling with trained personel on a daily basis. And also in OICC and ICC the children were reunified with caregivers after the period they stay in the Centre.	It is recommended to use a similar monitoring system for the PSSupport as the GOAL NGO uses in Kenema. It may be transfered to the other counterparts to improve this task.

All 3 report tables adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

The monitoring officer approached the field officers and the heads of the sectors with this executive report and the evidence of the dynamic databases (DB) to explain them the findings in the field and recommended some improvements with the communities. In the next round of visits the local leaders were contacted to verify if the issues were discussed and what progresses were done with the field team for the attention of the children, families or patients.

5.4 Elaboration of Systematization Curves to Complement the Analysis

The analysis of the Results were complemented with diagrams of the indicators (Kusek, 2012).

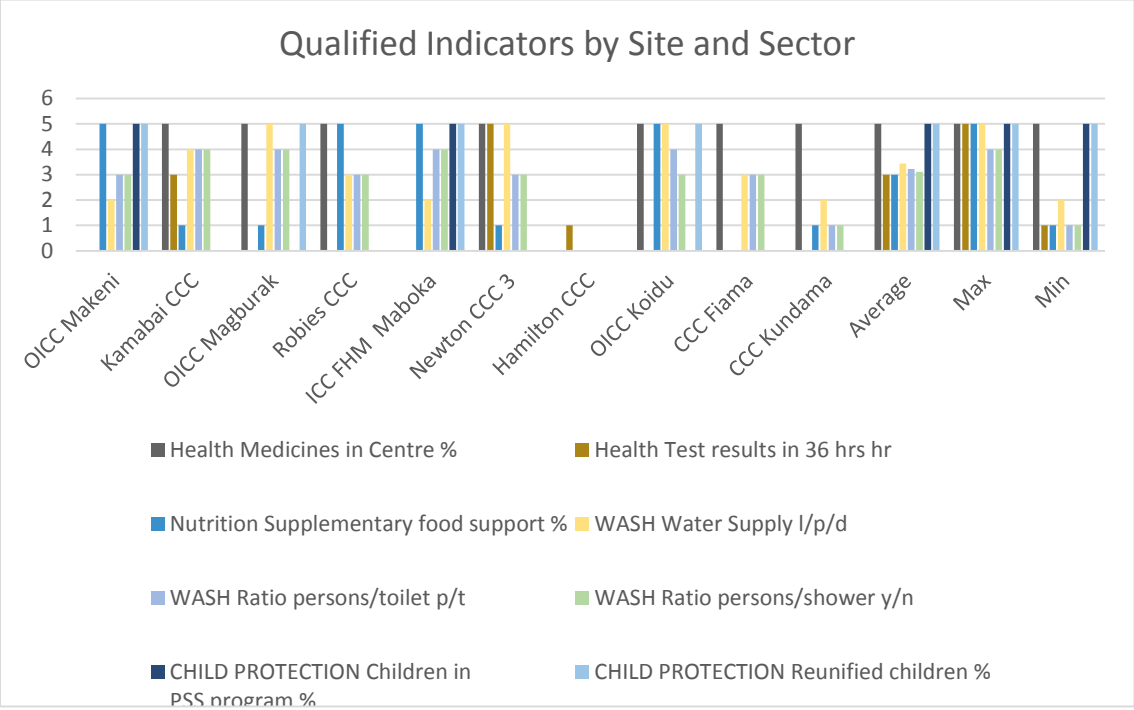
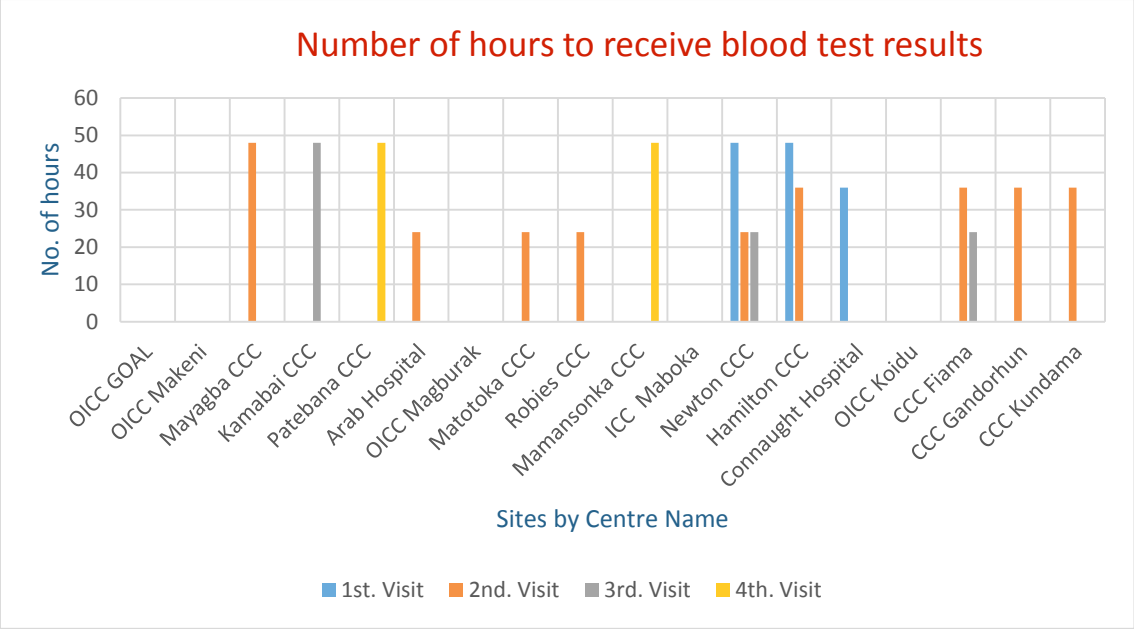


Figure 5.8 Systematization Curves of Qualified Results

Adapted from the Final Mission Report and PPT presentation in Quito-Ecuador Aug. 2015. Guachalla.

In the last Figure 5.8 the indicators of different sectors and sites could be compared in different periods because they were qualified.

In next Figure 5.9 there are some example of curves to analyze the trend or changes of indicators of different sites and periods of time. However, sectors cannot be compared, because they have different units.



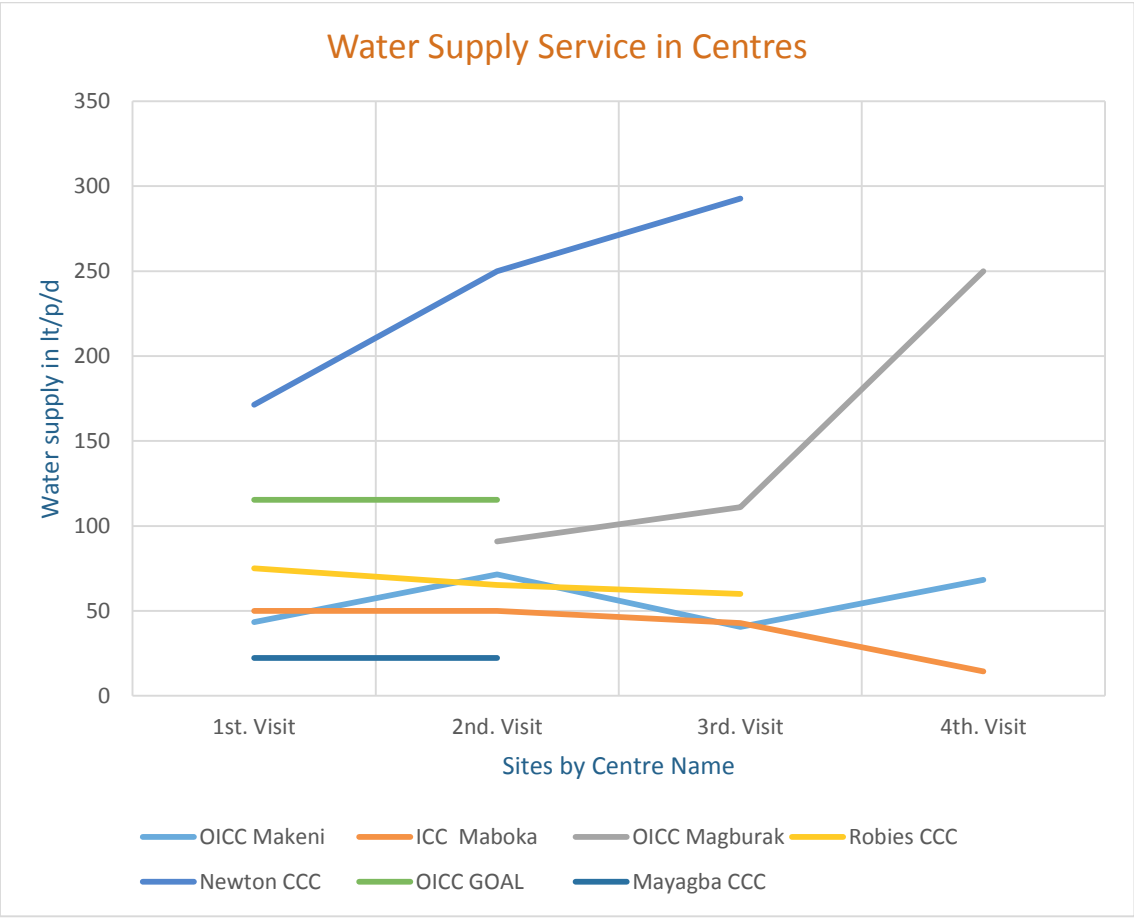


Figure 5.9 Output – Outcome Systematization Curves
Adapted from the Final Mission Report and PPT presentation in Quito-Ecuador Aug. 2015. Guachalla.

5.5 Conclusions, Recommendations and Lessons Learnt

a. Conclusions

The Humanitarian Performance Monitoring toolkit supported with the method for Project Planning, Monitoring, Systematizing and Learning was used in 3 Observation Interim Care Centers, 11 Community Care Centers, 1 Interim Care Center, and 2 Holding Centers, which were visited in 4 districts of Makeni (4 times), Tonkolili (4 times), Western Area (3 times), Kono (2 times).

The static databases were prepared first following a strategy in consultation with the Heads of Sectors and the Monitoring & Evaluation (M&E) team and a first visit to care centers attended by the field offices in the districts of Kenema and Makeni. Then, a questionnaire was elaborated in consultation with the sectors and used consistently to gather field data on the selected centers.

During the monitoring visits the heads of the care centers were consulted with help of the questionnaire and the information of the indicators was gathered. Then, the field data was downloaded and organized in a Field Information Table and used to calculate the Indicators of Outputs-Outcomes and to qualify them in a final table of Results.

With the analysis of this dynamic databases, three short executive reports were prepared, and the findings were shared with the M&E team, the heads of the programs and the community centers. The recommendations were appropriate and most of them followed by the sectors, and confirmed by the communities in the next visits.

The purpose of the method for Project Planning, Monitoring, Systematizing and Learning to empower the local leaders and the counterpart's field teams was achieved sharing with them objective information and analysis for improving the services to the families, children and women in the communities in coordination with the officers of the health ministry and the international organizations. The periodic reporting was in this way objective with quality, accountability and transparency.

The list for the weekly Situational Report was consolidated in coordination with the program officers in charge of the information and the counterparts like the Ministry of Health plus the colleagues of the Monitoring & Evaluation area.

With the hands-on field training of the Field Support Officers (FSO), it was clear that the tools of the method for Project Planning, Monitoring, Systematizing and Learning could be applied by officers and sectors on the field. With this in mind the monitoring task should be extended to larger areas and reduce the period of reporting to even less than a month.

The exercise with the ODK application through the ONA website showed that the use of the monitoring questionnaire in a cellphone was possible and it could be used also by field teams. In addition to the collected information in the Excel table, its transfer into the Output-Outcome calculation table and the qualification of the results could be much faster, so the reporting could be ready for stakeholders and management in much shorter time than the time used in Sierra Leone.

The sectors were supported with important information through the analysis of the results on diverse issues in Health, Nutrition, Water-Sanitation-Hygiene, and Child Protection. In education the schools were closed and the monitoring of this sector was limited to the question if children were listening to the lessons on the radio.

However, the spread of the disease was so erratic that a plan of training FSOs right at the beginning would had been an important solution for those places that the monitoring officer was not able to visit with the frequency that the emergency demanded.

b. Recommendations

One main recommendation is that monitoring should be recognized by different levels and stakeholders as a learning tool to reach qualitative humanitarian work and as an important support to the sectors and programs. So it is advisable to receive constant

feedback and transfer the method through hands-on training to field staff and if possible to partners to increase the coverage and the report quality and frequency.

In the last chapter there is a short course program, which can be adapted for training Field Support Officers (FSO) in a hands-on method for collecting the monitoring data on Centers or Camps, to download the information in the Summary table and to know how to calculate and analyze the main indicators. The training would include the use of mobile phones.

Another recommendation is to facilitate cyclic loops for feedback between several stakeholders, like the monitors, the persons in charge of the facilities, the heads of sectors, counterpart officers, and community leaders.

c. Lessons learnt

It was important to keep continuity for the analysis and support to stakeholders and management as suggested by Kusek 2004 and Patton 2012. So, the training of FSOs was an alternative to increase the coverage; even more, if new hotspot areas required new monitors. A transference process was needed like the training workshop, plus the hands-on training on the field and the use of an automatized process.

More help was needed for automatizing different steps of the process, not only the collection of data on the field with mobiles but also: e.g. the generation of the Summary Table, the calculation of the indicators and the qualification tables plus the graphics to have the field monitoring report ready at least every two weeks if not in a weekly basis.

Another lesson was that the performance in Care Centers was measured mainly by indicators of Health-Nutrition and Water-Sanitation-Hygiene, while in the Observation Interim Care Centers and Interim Care Centers mostly by the indicators of Nutrition, Water-Sanitation-Hygiene and Child Protection, being the two common programs for all centers.

Some graphics of the Systematization Curves seem to be more suitable for some analysis than others, as for example: The column bars could be used for showing the results and qualification of indicators in the visited Sites. All sites were represented with these graphics, even those with only one visit. The line graphs were best for the time charts or trends by Indicator, one could see the variations of the indicators for different Sites.

The graphs were prepared for the data values of the indicators as well as for the qualified indicators from 1-5. Both are useful with some differences e.g. the graphics of the values of the indicators could be used to compare between sites but not between indicators because they had different units.

The qualified indicators from 1 to 5, in some way smoothed the series of data (even the extreme indicators) and all indicators could be compared between each other for different sites, periods and programs.

Chapter 6 Application of the Method in Planning a Project Proposal in a Complex Environment

The last two chapters described the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) first in a regional project of five countries in Latin America implementing the method in the stages of planning and executive monitoring & reporting and second in the field monitoring detail using the static and dynamic databases of the PlaMSyL method in the Ebola emergency in West Africa.

The purpose of this chapter is to show the way how the method was used with that experience during the preparation of a project proposal with the office of United Nations Children's Fund (UNICEF) Ecuador to support out-of-school children in the complex area of the border between Ecuador and Colombia for a period of two years presented to the Humanitarian Initiative Program (HIP) "Education in Emergency" of the Directorate-General for European Civil Protection and Humanitarian Aid Operation abbreviated ECHO under time and resource constraints in January 2016.

This European initiative supports millions of children around the world thru different programs and the process to present a proposal is competitive and short timing. The invitation was send middle December 2015 and the deadline was between middle and end of January 2016 depending the program that each organization was approaching.

There was a web site where the proposal had to be uploaded. For that, the team had first to present the document on the ECHO-HIP format to the UNICEF office in Brussels for an in-deep revision and they would upload the final version, once all technical and qualitative requirements were accomplished.

The team of UNICEF had been in Esmeraldas and other areas of Ecuador due to the preparation to the threats of El Niño, the Cotopaxi Volcano and later for the Sika Virus Disease. The team for the proposal included the Education officer Anna Vohlonen and other officers and the managers of the UNICEF office in Quito.

6.1 Definition of the Area of Intervention

The area of intervention included 79 rural communities in 5 cantons of the provinces of Esmeraldas in NW and Sucumbios in NE of Ecuador in the border area with Colombia. The rural communities were sub-divided in Ecuador in Parroquias that corresponded to small areas of a community.

According to the political and economic organization of the country, the public system went from the national level through the provincial and cantonal governments up to the community and parroquia levels.

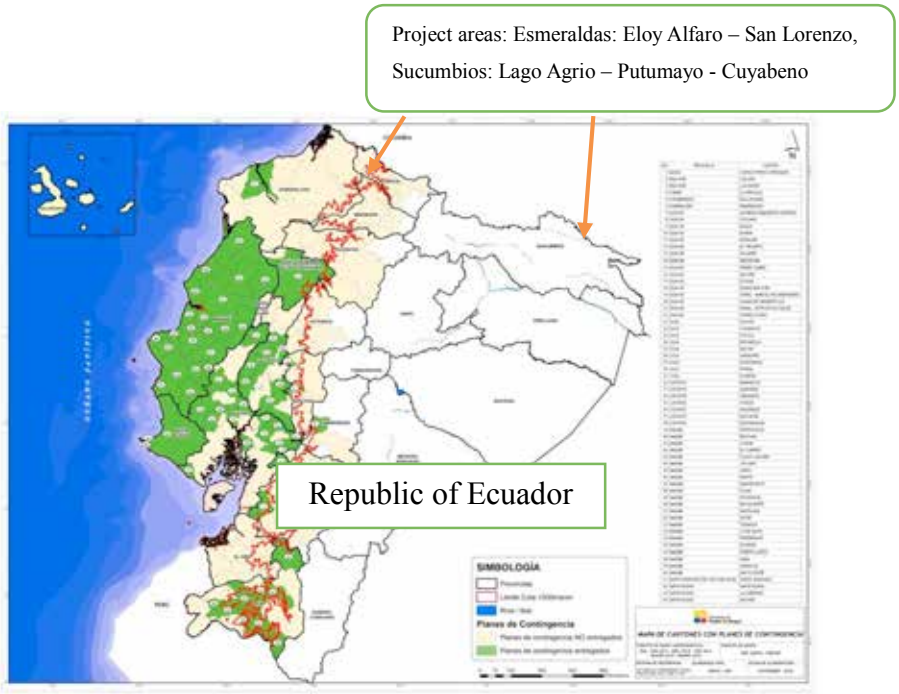


Figure 6.1 Map of Ecuador with Project Areas
Final Project proposal for ECHO, Guachalla et.al. 2016.

6.1.1 Problems and Needs

Emergency in this region was related to violence and lack of basic services. The spill-over of the Colombian conflict to Ecuador caused conditions of constant emergency for children, adolescents and families of both coastal Esmeraldas and Amazonian Sucumbíos provinces. Additionally, the province of Esmeraldas was affected by the El

Niño Phenomenon about every four years experiencing hard rains, floods, landslides and raised sea level and dangerous waves. The events were increasing in the last decade due to the climate change.

a. Education in emergency.

Over 20% of children and adolescents were not attending school in the provinces of Esmeraldas and Sucumbíos. In some indigenous communities the rate was as high as 40% (UNICEF, 2012). The preliminary results of a new action-research implemented by the Ministry of Education in Esmeraldas and Sucumbíos indicated the following causes for exclusion in education in the order of prevalence (UNICEF, 2015):

· Lack of access to early childhood education service (in case of children of 3 to 4 years old).
· Lack of access to secondary school in the area.
· Violence in the school.
· Lack of resources to cover the costs such as food, materials and transport.
· Domestic violence.
· Teenage pregnancy.
· Child labor.
· Disability.
· Lack of pertinence of the education.
· Lack of safe access to school.

For many of those who did attend school, learning outcomes were poor; for example in the cantons selected for the project illiteracy rates among rural women varied from 22.65% in San Lorenzo, Eloy Alfaro 20.07%, Putumayo 14.25%, Cuyabeno 12.65% to 10.25% in Lago Agrio (SENPLADES, 2010).

b. Physical and sexual violence.

In Esmeraldas, physical and sexual violence against girls and boys were rampant. 57% of the parents in Esmeraldas used violence against their children of 5 to 11 years of age

and 24% against adolescents from 12 to 17 years of age. The levels of physical abuse were higher in indigenous population.

In Sucumbíos the studies had revealed disappearance, kidnapping and death of parents as a reason for exclusion from education.

c. Health and hygiene, access to safe water and to health services.

The prevalence of diarrhea late 2015 in children below five years of age was at national level 11.8%, in Sucumbíos 14.4% and in Esmeraldas 18.2% and the prevalence of respiratory infections in children below five years of age was at national level 43.6%, in Sucumbíos: 38.3% and in Esmeraldas: 48.2%.

6.1.2 Analysis of Most Vulnerable Communities

The criteria to select the communities focused on the worst-off groups following the recommendations of the Sustainable Goals 2030. These were:

· Cantons with security and natural hazard emergencies.
· Rural area.
· Existence of an intercultural bilingual school (meaning indigenous community or strong presence of indigenous population).
· Fiscal (public) school.
· Existence or not of water services (and sewage water).
- Hard to reach communities and poverty higher than national average.

The proposal considered some risks:

· The armed conflict escalate in Sucumbíos or Esmeraldas.
· Wide spread natural hazards unable preventive activities.
· Frequent turnover of local government officials and district level public servants, and loss of contacts and technicians with newly built capacities.

Table 6.1 Complex and very Complex Community Areas

Province	Canton	Parroquia	Characteristics	Considerations	Classification
Esmeraldas	Eloy Alfaro	Atahualpa	Fluvial access by Cayapas river, approximately 4 hours from Canton Capital, existence of illicit activities, public services practically inexistent, Chachi indigenous communities.	High cost of transport, logistics and security need to be carefully considered and planned	Very complex
		Borbon	Canton capital, easy relatively road and fluvial access to the communities, presence of drugs and drug trafficking and other illicit activities, some public services available and fluvial transport to parroquias.	Security concerns	Complex
		San Josè de Cayapas	Fluvial access by Cayapas river, approximately 3 hours from the canton capital. Presence of strong afro traditions despite of many Chachi indigenous communities, problems with illegal mining.	High cost of transport, logistics and security need to be carefully considered and planned	Very complex
		Sto. Domingo	Fluvial access by Onzole river, approx. 3 hours from the canton capital. Mixed communities (afro and Chachi), absence of public services and authorities, illegal mining problems.	High cost of transport, logistics and security need to be carefully considered and planned	Very complex
		Telembi	The furthest most parroquia- fluvial access of 4-5 hours from canton capital, lot of migration and as a consequence new problems of insecurity.	High cost of transport, logistics and security need to be carefully considered and planned	Very complex
	San Lorenzo	Alto Tambo	Parroquia close to Colombia with very high levels of poverty, high number of Colombian refugees, currently health problems specifically tuberculosis. 1.5 hour road access from canton capital. High levels violence.	Security concerns	Complex
		Mataje	Parroquia closest to Colombia. Strong dependency of of NGOs. Easy road access from the canton capital.	Security concerns	Complex
		Santa Rita	Fluvial access by Bogotá river.	High cost of transport	Complex
		Tululbi	Road access, refuge place in between illegal activities, absence of state authorities.	Security concerns	Complex
Sucumbios	Lago Agrio	Dureno	Road and fluvial access by Aguarico river. Territory of the Cofan indigenous people.	Medium high cost of transport	Complex
		El Eno	Difficult road but relatively easy fluvial access to rural communities. Strong presence of Kichwa indigenous people and Colombians.	High cost of fluvial transport	Complex
		Jambeli	Difficult road access to the rural communities. Conflicts in the border, drug trafficking, extreme poverty. Presence of Kichwa indigenous nationality and few Shuar indigenous families.	Security concerns and limited daily time to stay in the communities	Very complex
		Pacayacu	Difficult road and fluvial access to the rural communities up to 4 hours from the canton capital. Extreme poverty. Presence of Colombians, Kichwa and Shuar indigenous peoples.	High cost of fluvial transport	Complex
		Santa Cecilia	Fluvial access to the Kichwa indigenous peoples' communities by Aguarico river.	High cost of fluvial transport	Complex
	Putumayu	Palma Roja	Parroquia on the Colombian border. Presence of Colombians, hard to reach Kichwa and Shuar indigenous peoples in the Riverside communities reached by San Miguel river. No sewerage or potable water. Limited telephone communication.	High cost of fluvial transport	Complex
		Puerto Bolivar	Fluvial access of 4 hours from the canton capital by Cuyabeno river. Wood trafficking, ilegal and legal hunting and fishing in the Cuyabeno reserve. Tourism. Territory of the Siona and Secoya indigenous peoples. No basic services available.	High cost of fluvial transport and lodging.	Very complex
		Puerto Rodriguez	Colombian border area. Road and 4 hour fluvial access from the canton capital. Serious security problems due to the presence of armed groups. Kichwa territory with some presence of Siona and Shuar families.	High cost of transport, limited daily working time in communities, security concerns.	Very complex
	Cuyabeno	Cuyabeno	Fluvial access by Aguarico river. Approximately 4 hours from the canton capital. Presence of Kichwa and Cofan communities. Strong presence of oil companies. Lack of basic services for the locals, except in the Millenium City constructed by the government.	High cost of transport	Complex.
		Aguas Negras	Difficult road access. Refuge place for the Colombian families. Absence of state authorities, basic services.	Possible security concerns	Complex

Adapted from Anna Vohlonen's elaboration, Education Officer for the Project proposal. 2016.

The communities were selected based on the above criteria and the information provided by the Ministry of Education of schools with number of attending children and adolescents, plus services that these schools and communities had.

The final list of participant communities included indigenous people of different languages and cultures e.g.: Shuar, Kichwas, Siona, Chachi, Secoya, Cofan and Eparana. Many of these communities lived along rivers, where boats were the only transportation.

The team of the National Secretary of Risk Management trained in Esmeraldas the cantonal Risk Management committees of San Lorenzo and Eloy Alfaro supported by UNICEF in three workshops for preparation against El Niño 2015.

The national Secretary of Water coordinated with UNICEF emergency preparation activities through the national working table 1 of Water & Sanitation. The two Secretaries knew and supported the project proposal for strengthening the Risk and Water committees in the communities of the project area.

6.1.3 Objective of the Proposal

The detailed description of the specific objective was: Out-of-School children and school attending children and adolescents are reached and supported by trained teachers and community leaders on child protection rights and by other informed community committees or promoters of health, Water-Sanitation-Hygiene and Disaster Risk Reduction to address with the Community Government Council the cases of violence.

6.2 The Tools of the Method Applied in the Project Design

It was necessary to start working a Venn diagram (Annex 3) for the project managers of other programs in the office, because of the complex situation in the area of the project

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due to the presence of many stakeholders and the needs and problems of the people, children and communities, plus the importance of the partners' working programs with the United Nations Children's Fund (UNICEF). The diagram helped to define the relationship and closeness between different stakeholders toward the main target population, the level of accountability in the project and the necessary coordination between them.

a. Static Databases.

- The geo-population list: The data of Annex 3 followed the criteria prepared by UNICEF on the most complex and vulnerable communities of the previous table and the information provided by the Ministry of Education with the result of 79 communities in 5 cantons with 5,489 school children, 1,098 out-school and 4,391 attending school children and adolescents, plus 210 teachers.
  That list was consulted with counterparts, which had ongoing activities and presence in the five cantons of the two provinces for several years supported by UNICEF. And at national level with the personnel of the Ministry of Education in charge of those areas.
- The log-frame (LF) with the information of the targets, indicators (OVI), means of verification, and assumptions and risks. In this case there were 3 Results at outcome level and one Specific Objective. The ECHO LF format was used in this proposal, where the narrative was in the first column, the targets and indicators in the 2nd column and the means of verification in the 3rd. The number of target population was rounded to 1,100 out-of-school children, 4,400 attending school children and 2,700 families. The assumptions and risks were included at the end of the format with the preconditions.
- The LF-Tree was elaborated with the information of the LF and filled the conditions of the Outcome Mapping (OM) at the same time was useful to find the coherence and consistency between the narrative, targets and the indicators for the future project. The OM guiding principles of Actor-centered development, behavior change, continuous learning and flexibility, Participation and accountability were accomplished in the project proposal.

- The time table in Annex 3 with the activities to reach the expected results in two years subdivided in five appropriate periods of organization, capacity building, and replication, strengthening and leaving the area. The format used for the proposal was provided by ECHO in the invitation.
- The personnel chart for accountability was organized with a team of 15 technicians and social workers, divided in two teams, one for each province.
- The Plan for Quality-Accountability-Transparency (QAT-Plan), which articulated the main elements of the previous charts had two main parts, the first with a time diagram in the X-axis divided in five periods (following the recommendations of the 3rd Chapter): Organization, Capacity building, Replication, Strengthening for results and Leaving the area. The Y-axis was divided in five levels for (starting at the bottom) follow up of activities and inputs with process indicators, monitoring outputs with product indicators and outcomes with change indicators and a last level subdivide in an internal monitoring of advances toward the specific objective and an external evaluation for measuring the impact of the project.

  The 2nd page of the QAT Plan contained a column with the description of the indicators (OVI), the frequency to report on the advances, the column for the person accountable for reporting and the column of means of verification for assuring the transparency of sharing the information among the stakeholders in the project. In this form the QAT Plan merged the main information of the Geo-population list/map, the Log-frame, the time table and the personnel chart in order to reach the criteria of Quality-Accountability-Transparency.

  With this information the QAT-Plan accomplished the characteristics of a Fusion Model, that merged the information of the results based Log-frame Approach and the capacity building Outcome Mapping of the counterparts and stakeholders of the project.

Table 6.2 Log-frame

Title of the action		
Education and Protection for Children and Adolescents in Emergencies at the Ecuador - Colombia Border		
PRINCIPAL OBJETIVE		
The most vulnerable indigenous children, women and families in Ecuador in the border provinces with Colombia of Esmeraldas and Sucumbios live in peaceful communities		
Intervention logic	Targets and Objectively verifiable indicators	sources of verification
SPECIFIC OBJECTIVE:		
Out-of-School children and school attending children and adolescents live and participate in three protective environments: family, school and community strengthened through the Education in Emergency program, the protection leaders and community committees and organizations addressing the cases of violence with the Community Government Council and supported by the cantonal protection organization.	Indicator 1: Out-of-school and school attending children and adolescents live in 3 protective environments supported through school, and the community government council and the community assembly. Target value 1: 1100 out-of plus 4400 in school children Indicator 2: Committees, services and authorities support the Children Adolescents Protective Space leaders to address situations of violence of out-of-school and attending school children to community assembly Target value 2: 395 CAPS-School-Health-WASH-RM committee Indicator 3: Cantonal Protection Organizations support monthly the out-of-school tracking system of children and adolescents in situation of violence and the community protection leaders through the parroquia GADs. Target value 3: 5 cantonal protection organizations	• 4 semester participative reports of project partner • 4 semester participative reports of the UNICEF Project manager • Compiled 4 semester reports of the sector authorities (municipal GAD)
RESULT 1: Strengthened families of out-of-school and attending school children and adolescents are supported by trained teachers, parents' school committees (JEPF) and by CAPS community leaders to build enabling family environments, preventing and addressing situations of violence, in close collaboration to community government council and community assembly.	Indicator 1.1: Number of out-of-school and school attending children and adolescents included and participating in schools preventive and protective activities. Target value 1.1: 5500 Indicator 1.2: Number of CAPS community leaders trained and supporting out-of-school and school attending children and adolescents in a weekly basis. Target value 1.2: 79 Indicator 1.3: Number of teachers trained and supporting out-of-school and school attending children and adolescents. Target value 1.3: 210 Indicator 1.4: Number of parent's school committees (JEPF) trained and supporting out-of-school and school attending children and adolescents in a monthly basis. Target value 1.4: 79	quarterly reports of the project counterpart, 4 semester reports of the UNICEF project manager following the indicators of results, Each sector of the parroquia GAD present a quarterly report on the advances of the activity indicators toward the Result 1 in their parroquia. And the corresponding municipal (cantonal) organization prepares a semester report to UNICEF.

RESULT 2: Strengthened learning communities (teachers, JEPFs and students) and CAPS leaders coordinate with health, WASH and RM committees, to address situations of violence against out-of-school and school attending children and adolescents with the community government council.	Indicator 2.1: Number of community health personnel or promoters trained and supporting out-of-school and school attending children and adolescents in situation of violence in particular young girls and boys. Target value 2.1: 79 Indicator 2.2: Number of water services personnel: operators, water administrator and water committee presidents trained and supporting out-of-school and school attending children and adolescents with hand washing campaign. Target value 2.2: 237 Indicator 2.3: Number of community committee members for Risk Management have a one page action plan for emergencies (PAE) and these personnel are trained and supporting out-of-school and school attending children and adolescents in participating on the School Risk Map and School Simulation activities. Target value 2.3: 237	8 quarterly reports of the project counterpart, 4 semester reports of the UNICEF Project Manager following the indicators of results, Each sector (Education, Protection, Health, WASH, RM) of the organizations of parroquias present a quarterly report on the advances of the indicators toward the Result 2. And the municipal GAD corresponding to the Cantonal Protection Organization prepares a semester report to UNICEF.
RESULT 3: Strengthened cantonal protection organizations (Junta cantonal de Protection JCP) support the tracking system of out-of school children and adolescents in addressing and monitoring cases, working in close collaboration with CAPS leaders and the community government council.	Indicator 3.1: Number of cantonal protection organization (JCP) trained and providing support to Community Government Councils and Community Assemblies on out-of-school and school attending children and adolescents in situations of violence. Target value 3.1: 5 Indicator 3.2: Number of leaders of CAPS in coordination with JCP (cantonal committee of protection) addressing violence situations with the CGC (Community Government Council). Target value 3.2: 79 Indicator 3.3: Number of community and parroquia tracking systems of out-of-school children and adolescents in situations of violence functioning. Target value 3.3: 98	8 quarterly reports of the project counterpart, 8 quarterly reports of UNICEF project manager following the indicators of results, The education and protection sectors of the municipal GAD present a quarterly report on the advances of the indicators toward the Result 3.
PRECONDITIONS: • Because of the complexity of the intervention is a precondition that the potential partners build a multidiciplary team so they can work together the challenges of the project with the communities and parroquias • The authorities and committees of the cantonal level will accompany the project field team in the activities at parroquia and community level so they can follow the achievement of the results and support the communities in the future • The meteorological conditions will allow the field team to reach and make its tasks with the communities		
ASSUMPTIONS AND RISKS: • The armed conflict escalates in Sucumbíos and no field technicians will be available for the specific area of the conflict (meaning specific part of the border river or specific communities). • Wide spread natural disasters unable preventive activities. • Frequent turnover of local government officials and district level public servants, and loss of contacts and technicians with newly built capacities.		

Adapted from the Final Project Proposal to ECHO. Guachalla et.al. 2016.

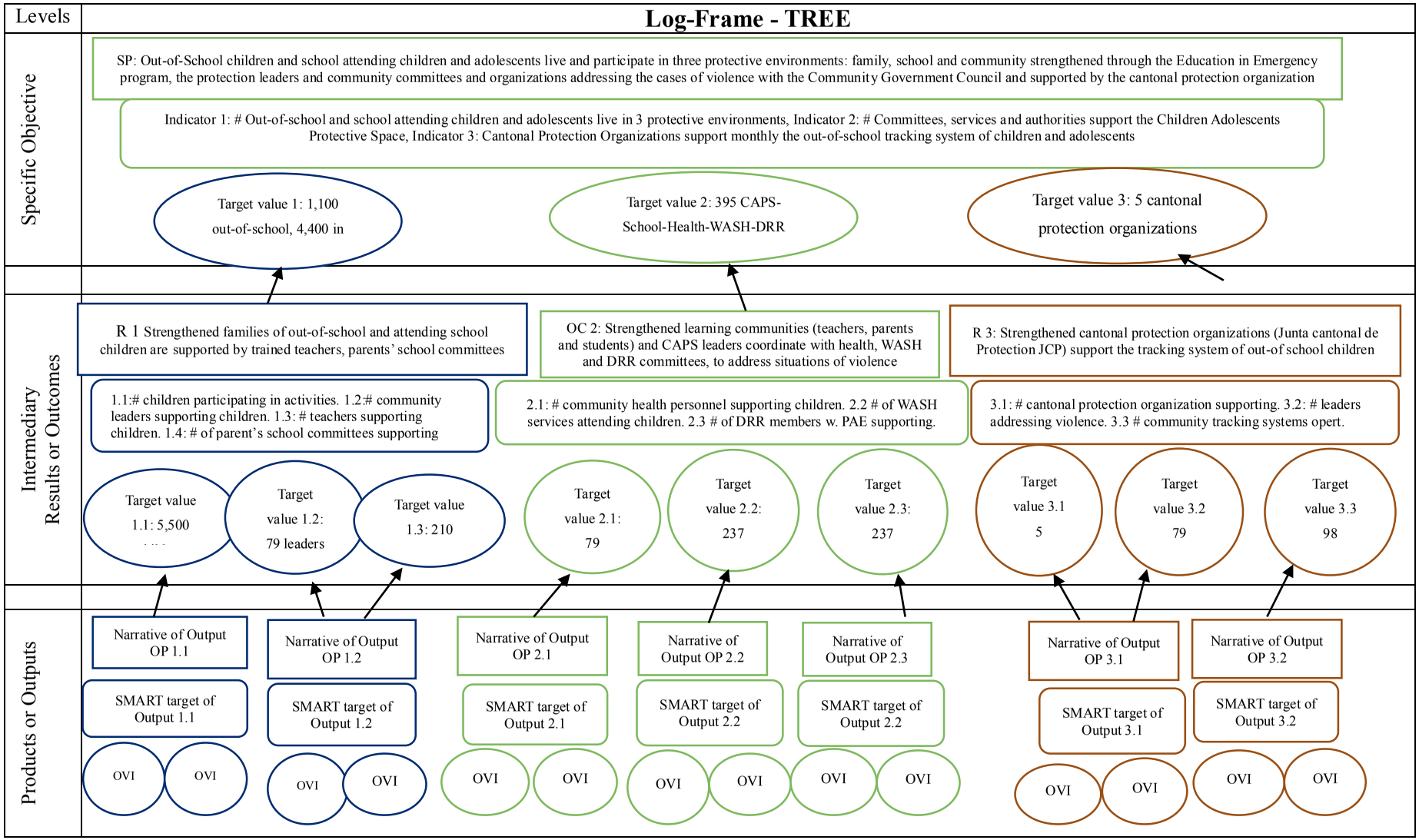


Figure 6.2 Elements of the Outcome Mapping LF-Tree, Adapted from Guachalla 2008 and the Final Project Proposal. Guachalla et.al. 2016

b. Personnel Accountability Chart.

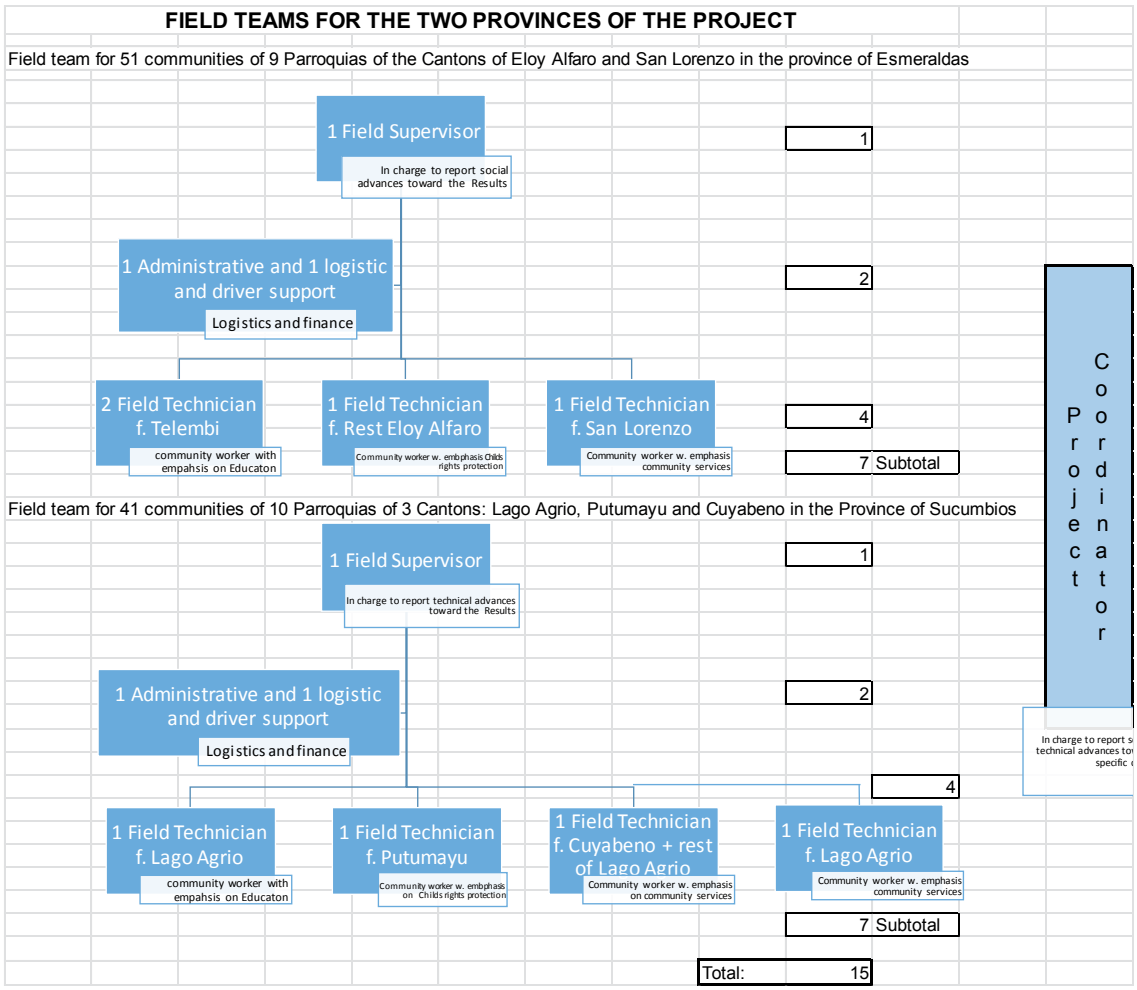
The implementing partners would build two field teams to attend the 79 communities according to the personnel chart in next page. Following the purpose of the project, the project team would implement activities in each community related with the five main sectors of Children Rights Protection, Education, Health focused on the support to children that suffer some kind of violence (physical, sexual, Gender Based Violence or human trafficking) and complemented with basic services at family, school and community levels of Water-Sanitation-Hygiene (WASH) and Disaster Risk Reduction (DRR), in order to strengthen the wellbeing of the children and their families.

The project team was built up with a Project Manager (most probably an UN-Volunteer) contracted by UNICEF and two field teams with five and four local field technicians (according to the size of each area) and one local supervisor for each team. The technicians will have a back ground on children rights protection, education, DRR, health and WASH. They would support to each other building the community capacities. The supervisors would have strengths on social and technical questions, to support the technicians and to monitor the results at community level.

Each field team would have a base in the main Canton of the project in Esmeraldas: San Lorenzo or Eloy Alfaro and in Scucumbios in Lagro Agrio, Putumayu or Cuyabeno. However, each technician would stay in her/his corresponding canton. Both provincial teams would be supported by two administrative and logistic technician, this last would be a driver to deal with the purchase of fuel and supplies for the by-weekly trips to the field.

The technicians would work the tasks during the five main periods of the project in 2 modules per month reaching ten communities each and emphasizing the dialog with the stakeholders mainly at community level and the feedback with the counterparts and stakeholders, at canton and provincial levels also, and informing the national counterpart.

Table 6.3 Personnel Chart for Accountability



Final Project Proposal to ECHO. Guachalla et.al. 2016.

Table 6.4 Summary Table of the Project Personnel

Location Province	Location Canton	Location # communities (parroquias)	No. Technicians	No. Supervisors	Administrator + Logistic officer
Esmeraldas	Eloy Alfaro	23 (Telembi)	2	1	1 + 1
		10 (4 parroquias))	1		
	San Lorenzo	8 (4 Parroquias)	1		
Total Esmeraldas		41 (9)	4	1	1 Adm. + 1 Log.
Sucumbios	Lago Agrio	20	2	1	1 + 1
	Lago Agrio rest	4	1		
	Cuyabeno	4			
	Putumayu	10	1		
Total Sucumbios		38 (10)	4	1	1 Adm + 1 Log.
Total Project:		79 (19)	8	2	2 + 2

The project team would count also with a Project Manager, making a total of 15 persons.

Table 6.5 Plan for Quality-Accountability-Transparency

QAT-Plan Quality-Accountability-Transparency) for Monitoring and Reporting

(a method for planning-monitoring-systematizing-learning during the implementing of a project in a dynamic and complex context)

	Stages:	**Organization**	**Capacity strengthening**	**Replication**	**Strengthening toward targets**	**Leaving the area**
	Periods:	1 Quarter	2-3 Quarters	4-5 Quarters	6-7 Quarters	8 Quarter
		months 1-3	months 4-9	months 10-15	months 16-21	months 22-24
Main tasks						achieved targets of SO
External evaluation of impact						# & %OoS children back in school activity
						# & %OoS children tracked periodically
						# & %children living in 3 protective enviror.
				in month 12 internal monitoring of:	in month 18 internal monitoring of:	# & %communities w. 3 protective environ
				advanced targets of Results 1-4	improved targets of Results 1-4	# & %GAD parroquias w.protective enviro.
external UNICEF monitoring of advances toward main objective and outcome indicatores			In month 6th strengthening of the	# & %OoS children back in school activities	# & %OoS children back in school activitie	achived targets of Results 1-3
			field team for making sure about	# & %CAPS supporting children in conflict	# & %families reach 1st.protecti.environm.	# & %CAPS coordinating w. JCP
			the indicators of RESULTS 1-4,	# & %schools reaching a protective level	# & %communities reach 3rd.protec.envir.	# & %EU coorinating w. District (canton)
			and the SO indicators	# & %health pro. support children in conflic	# & %commun. w.safe water & phaces free	# & %JAAP sustain a quality water service
			2,700 families of 79 communities and 79 educative communities (teachers-JEPF-parents) and 79 CAPS leaders participate in prevention, protection and response to situations of violence against Out-of-School and school attending children and adolescents	# & %schools-commu. w. WASH & DRR	# & %CCRM members w. PAE	# & %CCRM coordinating w. MGADs…
				# & %GAD parroquias monitoring project	# & %municipal GAD supervising project	# & %health centers coord.w.health district
Monitoring of changes and advances toward RESULTS 1-3				# & %of children receiving support of communitiy services	# & %of children living in free of violence environments, receiving support of communitiy services	
			12,500 families of 19 parroquias know about the project goals and 3 protective environments for children and adolescents	# & %families participating to reach a level of protective environment	# & %families reaching a level of protective environment	
				# & %schools participating to reach a protective level	# & %schools reaching a protective level	
				# & %communities participating to reach a level of protective environment	# & %communities reaching a level of protective environment	
Monitoring of Outputs		79 community committees are bilded:	210 teachers; strengthened teachers on skills, knowlege and tools f. prevention, protection and response to situations of violence against OoS and school attending children and adolescents	70% leaders of CAPS support children in conflict areas	50% children start living in 3 protective environments supported by all services	
		for children-adolescent protective space	80 CAPS personnel	70% school teachers provide protective support and coordinate with JEPF	70% teachers and JEPF work and coordinate in 2nd protective environment	
		for School support: (JEPF)	100 Protection and Education GAD pers.	70% health center personel support young girls and boys on prevention to violence	70% health personnel support the 3 protective environments	
		for health to support children in conflict	240 JAAP personnel	70% CCRM members have their PAE (one page Plan for Action in Emergency)	70% CCRM coordinate w. schools for risk map, simulation and evacuation plan	
		for DRR: CCRM / for WASH = JAAPs	240 CCRM personnel	70% JAAP (wash committees) personnel provide shcools and community safe wat.	70% JAAF personnel support the 3 protective environments in communities	
Follow up of activities, inputs and supplies		Field team contract	79 (H-RM-WS) community; have access to relevant evidence and information on the situation of violence against OoS-school attending children adolescents	90% trained personel of communitiy services coordinate replication activities w. project and GADs of the parroquias: CAPS-School-health-CCRM-WASH	Analysis of OVI and definition of adjusments to strengthen weak OVIs	Field team follow up community services supporting the 3 stablisched protective environments
		fix training material	19 GAD (Healt-RM-WS) parroquias		Strengthening training to areas with weak OVIs with paroquia and municipal GADs	
		training proj.personl	5 GAD of cantons	90% municipal GADs trained personnel coordinate w. project field supervisors for monitoring actions at community and parroquia level		Supervisors of the field team coordinate monitoring activities with GADs of parroquias and cantons supporting the 3 community protective environments
		Field authority visit	2 provincial GAD authorities			
		Planning meetings	5 minisiterial authorities are informed			The implementing partner contract an evaluation consulting for the final report
			MIES-MINED-MSP-SGR-SENAGUA			

MONITORING AND REPORTING SCHEME

SHORT DESCRIPTION OF (OVI) INDICATORS	FREQUENCY	RESPONSIBLE		MEANS OF VERIFICATION
1,500 OoS children back in school activities	Last 8th quarter	Head of implementing partners	accompanied by:	National and bi-national tracking system information
1,500 OoS children tracked every month at community and parroquia le			municipal GADs	
1,500 OoS +15,000 children living in 3 protective environments			provincial GADs	Ministerial and Provincial reports on services for OoS+school children
92 communities w. 3 protective environments			Technicians of 5 ministries.	
19 GADs of parroquias replicating the protecting environments				
3,700 families replicating the protective environment; 92 educative communities (teachers-JEPF-parents) and 92 CAPS personnel participate in prevention, protection and response to situations of violence against OoS and school attending children and adolescents	Every 6 months (months 6-12-18-24)	UNICEF M&E specialist	accompanied by: supervisors of implementing partners; Technicians of 5 municipal GADs	6 months reports of the project leader, 6 months reports of the M&E external specialist of UNICEF, Compiled 6 months reports of the sector authorities of cantons (municipal GAD), according to the stages of the project: organization, capacity strengthening, replication and strengthening for the targets.
92 educative units replicating the protective environment				
92 communities replicating the protective environment				
92 CAPS supporting OoS and abused children				
92 health promoters or workers supporting young girls and boys				
92 communities and schools with safe water and free of open defecation				
270 CCRM members w. PAE & 92 schools w. risk map & simulation				
180 CAPS personnel support OoS & abused children in conflict areas	Every 6 months (months 3-9-15-21 in coordination w. external UNICEF monitoring months 6-12-18-24)	UNICEF M&E area	accompanied by: supervisors of implementing partners; Technicians of 5 municipal GADs	3 months reports of the project counterparts, 3 months reports of the M&E-MoRES UNICEF unit following the indicators of results, Each sector of the municipal GAD present a 3 months report on the advances of the indicators toward the Result 1, 2, 3 and 4 according to the stages of project of organization, capacity strengthening, replication and strengthening towards the targets
290 school teachers provide protective support in coordination w.JEPF				
92 health personel support young girls and boys on prevention				
270 CCRM members have their PAE (1-page Plan for Action in Emergency)				
180 JAAP (wash committees) personnel provide shcools and community safe water				
290 teachers know about the protective environments in communities	Every six weeks (month and a half)	Project manager of the implementing partner	accompanied by: supervisors of implementing partner; Technicians of 19 GADs of parroquias	3 months reports of the project counterpart, 3 months monitoring reports of the Municipal GADs
180 CAPS personnel are trained by project on OoS & abused children support				
92 health promotors are trained by project on young girls-boys (OoS) safety				
280 JAAP personnel trained by project on community-school safe water and free of open defecation				
280 CCRM personnel are trained by project on protective and community risk reduction and resilience indicators				
In 92 communities committees (education-protection-health-RR-wash) are selected, trained and implement the project activities w.	Every month	Field team supervisors	accompanied by: field team; community leaders; Technicians of 19 GADs of parroquias	monthly reports of the project counterpart on activities, HR, supplies and financial expenses by-monthly report of the parroquia monitoring GAD
19 GAD of parroquias are trained, accompany the project team in 92 communities and school units, and start replicating the project.				
5 GAD of cantons are trained and accompany the project monitoring				
2 provincial GAD authorities are informed and support the project				
5 minisiterial authorities are informed and support the project				

Short Summary of Main OV-Indicators
EDUCATION:
& % Schools w. OoS children and adolescents back in school activities and tracked # & % School teachers and JEPF attending OoS and abused chlidren and adolescents # & % education districts supporting the schools of the project # & % Schools w. WASH service and Hygiene corner f. children # & % schools w. RM-R activities: risk map, simulation, # & % schools coordinating with district and municipal GAD
PROTECTION
CAPS personnel participate in prevention, protection and response to situations of violence against OoS and school attending children and adolescents. # & % CAPS refurnished and with trained personnel on prevention, protection and response to situations of violence against Out-of-School and school attending children and adolescents # & % OoS and abused children receiving support in CAPS # & % of CAPS community parent committees coordinating w. personnel # & % of protection authorities of municipal GAD supporting project
WASH
Personnel have access to relevant evidence and information on the situation of violence against OoS-school attending children adolescents # & % WASH community committee and JAAP personel trained # & % trained WASH committees supporting OoS and abused children # & % OoS and abused children homes have access to safe water # & % community committees supporting their services # & % JAAPs supporting and replicating the project goals # & % of WASH authorities of municipal GAD supporting the project
Risk Management and Resilience
Personnel have access to relevant evidence and information on the situation of violence against OoS-school attending children adolescents # & % OoS, children and adolescents in conflict in RM-R activities in the school # & % of OoS, children and adolescents in conflict replicating the RM-R activities in their homes # & % RM-R community committees trained and coordinating w. schools # & % CCRM coordinating activities with WASH and Health sectors in
HEALTH
Personnel have access to relevant evidence and information on the situation of violence against OoS-school attending children adolescents # & % health promotors with trained personnel # & % trained health personel supporting OoS and abused children # & % OoS and abused children receiving support by health promoters # & % community committees coordinating w. health personel # & % health parroquia officers supporting and replicating the project # & % of health authorities of municipal GAD supporting project

Adapted from the Final Project Proposal to ECHO, Guachalla et.al. 2016.

6.3 Conclusion, Lessons Learnt and Recommendations

a. Conclusions

The use of the tools of the method Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) for this proposal was efficient, despite the time and budget constraints. The public invitation was launched middle December, when most people in Ecuador start the holiday season and the proposal had to be presented to the United Nations Children's Fund (UNICEF) office in Brussels middle January for the revision and final elaboration.

The schedule was reached because the tools of the PlaMSyL method for the planning stage facilitated the process of organization of the information with the static databases for the proposal and merged the different data sources. The knowledge of the personnel of UNICEF was determinant also, because they had worked in the area and maintained contact with stakeholders through ongoing projects with the participation of communities.

The proposal was arranged to support most vulnerable communities in the complex area at the border area between Ecuador and Colombia. The tools of the method fulfilled the requirements of the Fusion Model (FM) by merging in the plan for Quality-Accountability-Transparency the information of the Geo-population list/map, Log-Frame (LF), LF-Tree, Time Table and Personnel Chart achieving the cornerstones of the FM, which are: focus on behavioral changes and capacity building, complementarity between the Log-frame Approach and the Outcome Mapping's learning pathways and the capacity of the partners in the area.

The proposal was successfully uploaded by the UNICEF Brussels office into the ECHO web site on January 26. 2016.

b. Lessons Learnt

The contribution of the UNICEF officer of Education, who had worked in the area and maintained herself active in ongoing projects with main stakeholders and vulnerable communities in the two provinces, has been effective for the preparation of the proposal.

Due to the complexity of the area and the relationship among the stakeholders it was necessary for the team to be innovative (Patton and Rogers, 2012) with tools like the Venn diagram and the project strategy in next page. These tools helped the project proposal team to communicate with the partners in the area, plus the counterparts at the Ministry of Education and the rest of the team and management in UNICEF Ecuador.

In the next page is the summary of the project strategy in a graphic, which showed in the first quarter the information and organization period, in quarters 2 and 3 the capacity building process in cascade format to reach the community leaders, schools and families. The quarters 4 and 5 of replication where the indicators would be measured and qualified to have a reinforcement period in quarters 6 and 7 to prepare leaving the area in quarter 8.

This strategy followed the lessons from the Systematization Curve and the Plan for Quality-Accountability-Transparency (QAT-Plan) of the method for Project Planning, Monitoring, Systematizing and Learning. The Systematization Curve and the QAT-Plan helped the project designers to realize the periods where the community leaders and committees had to replicate their knowledge and receive an extra support for strengthening their tasks in the communities and to support the out-of-school children.

c. Recommendations

It is important for future projects to count for the planning stage with the information of the geo-population list and map, plus the coherent and consistent log-frame (LF) sustained with the outcome mapping LF-Tree, plus the time table and the personnel chart for accountability purposes to facilitate the elaboration of the QAT-Plan for quality, accountability and transparency to achieve the requirements of a Fusion Model

that joins the results-oriented log-frame approach with the outcome mapping learning pathways to facilitate the monitoring and learning process in a dynamic, non-linear and complex context.

It is recommended to count with periods of cyclical loops for feedback and learning between the different stakeholders at the diverse levels of the project mainly in the communities and at the local government level with the supporting organizations and stakeholders.

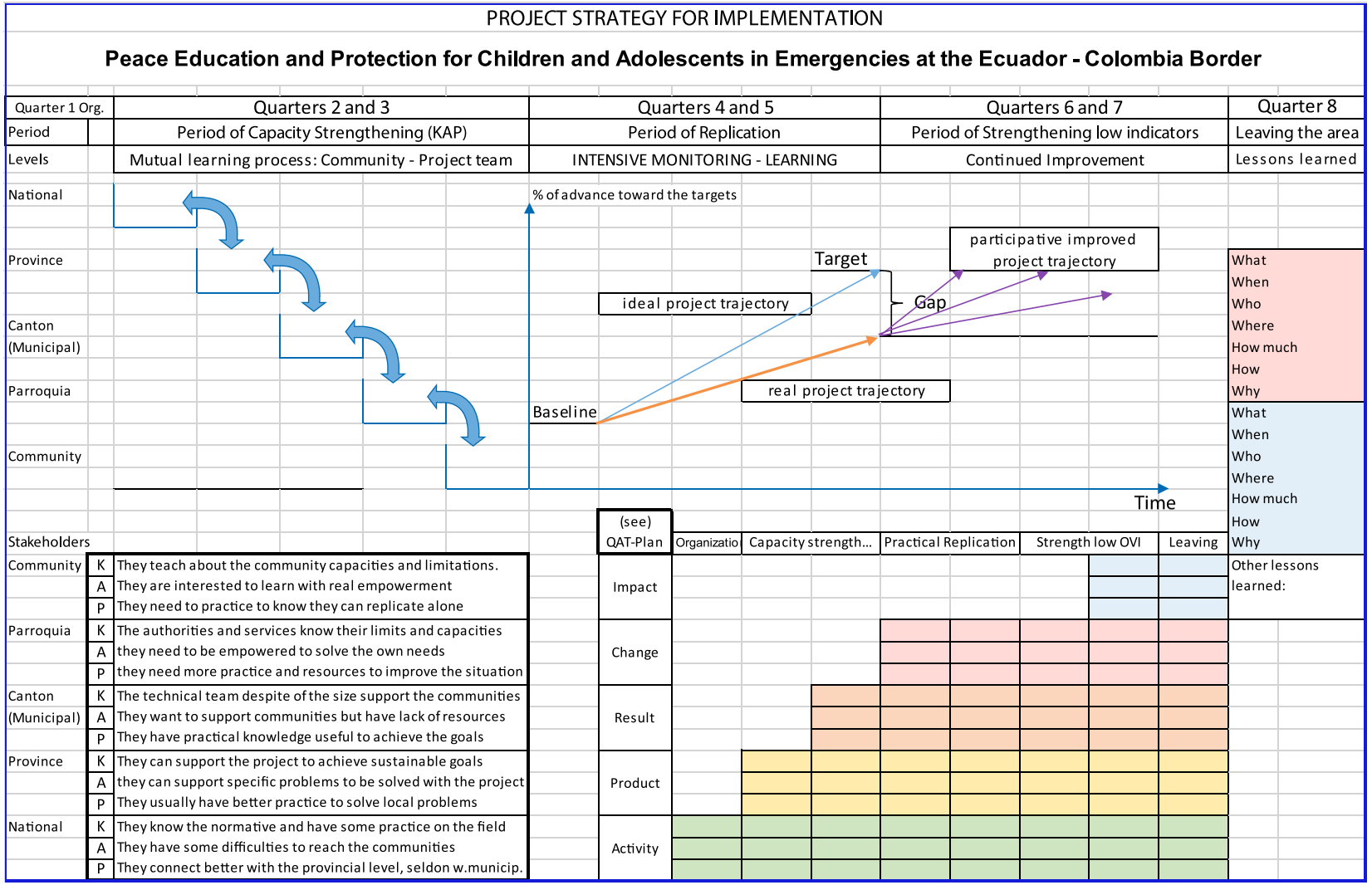


Figure 6.3 Summary of the Project Strategy
Adapted from the Final Project Proposal to ECHO. Guachalla et.al. 2016.

Chapter 7 General Conclusions, Lessons Learnt and Recommendations

This chapter discusses the main conclusions, lessons learnt and recommendations of the dissertation first in relation to the main questions and hypotheses and then from the point of view of the Local Technical Teams (LTT). These groups were a target of this dissertation, because they work close to those communities, which require better services for improving their wellbeing within the paradigm of Sustainable Goals 2030. Those LTTs need specific support for planning with, monitoring to and learning from development projects with participant communities and to coordinate with the national and regional levels.

This is also a concern of the international organizations following the Paris Declaration on aid effectiveness that promoted ownership, management based on results and accountability in developing countries in a rather bottom-up approach.

The analysis focuses the relation between Projects, Programs and Plans and Policies (Patton, 2012), which are related to the geographic and political levels in developing countries and to several stakeholders who could coordinate for better results. In short, the following table helps to clarify the conclusions in the next sections.

Table 7.1 Levels of Analysis for Conclusions and Recommendations

Regional–Political levels and geographic area	Municipality - District - Community	Departmental – Provincial	Country	Public Operation level
	Local	Regional	National	
Programmatic level			Plan	National technical team NTT
		Program		Regional technical team RTT
	Project			Local technical team LTT
Organizational presence	Local NGOs	International NGOs	UN-Agencies	

The raw of organizational presence is a general common view, but there are exceptions: e.g. Local NGOs working in communities with national presence. Or International NGOs, that have presence at community and national levels as well.

Adapted from Guachalla, 2005 and 2011.

- Local governments that include municipalities or districts and communities with the Local Technical Teams (LTTs) in accordance with the focal points of

program sectors (e.g. health, education, Water-Sanitation-Hygiene, Disaster Risk Reduction, etc., see also Table 7.3) who coordinate with local teams of Non-governmental Organizations (NGO).

- Regional (departmental or provincial) level with technical teams, called in general Regional Technical Teams, based also on programmatic focal points, who should have inter and intra-sectorial coordination with the LTTs and the National Technical Team, plus international NGOs, which habitually have the capacity to work at this and at local level if necessary.
- National level with the team based on the ministerial focal points who coordinate with the international agencies and should bring together the regional and local teams for coordination on local development.

Several international NGOs have their own local teams in many countries working directly with communities and coordinating with LTTs because difficult social problems need to be solved. On the other side, some national NGOs have focused social and productive programs in the capitals and big cities of a country and low presence in small municipalities.

7.1 Summary of the General Conclusions

The United Nations Unfinished Agenda based on the results of the assessments of the Millennium Goals 2015 was fundamental for the elaboration of the new Sustainable Development Goals (SDG) 2030, which implicitly defined a new paradigm to attend worse off groups in more difficult contexts with characteristics of non-linear, dynamic and complex environments.

Several authors explained that Monitoring & Evaluation approaches should consider the characteristics of the new paradigm, look for the participation of several stakeholders, and respond with innovation to the emergent and dynamic aspects, and to be flexible and to facilitate continuous learning through feedback.

The theory of change called QAT-Plan for the criteria of Quality-Accountability-Transparency of the method for Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) fits well with the characteristics of a Fusion Model since it joins the results-oriented Log-frame Approach with the Outcome Mapping's process-oriented learning pathways. This has been supported with the development of the LF-Tree, which is an outcome mapping for a participative community of learners with innovation and flexibility.

The method is adequate to the non-lineal and dynamic context of the paradigm of the Sustainable Goals-2030. The Systematization Curve and the dashboard report complement the QAT-Plan and can be used also in some complex context of several stakeholders with the challenge to respond to emergent issues with the inclusion of cyclical feedback loops.

It was shown in the practice of the PlaMSyL method and its tools of static and dynamic databases with local technical teams in different scenarios, that the method is a good alternative for strengthening local teams in Planning, Monitoring and Learning.

The five static and three dynamic databases of the PlaMSyL method were developed in simple excel tables easy to be applied by LTTs in different developing countries at local level and in the three stages of Planning, Field Monitoring and Executive Reporting.

This approach served not only for supporting local teams, and the dialog and necessary adjustments among stakeholders but mainly to strengthening the empowerment of the so called beneficiary of the projects, to get better prepared for new challenges to achieve their sustained and resilient wellbeing with good governance.

The practice of the dissertation showed that the field monitoring stage is in the sense of planning, monitoring and learning probably the most important for the hands-on practice with local technical teams and the empowerment of the local communities. In the next table there is a synthesis of the main contributions of the authors about the stages of planning and learning.

Table 7. 2 Comparing between Planning and Learning Criteria

Criteria	Author	For Planning	For Learning
Log-Frame Approach LFA	P. Rogers and R. Hummelbrunner	SMART indicators and targets with. list of assumptions and risks and means of verification.	Critiques: Supposed lineal trajectory defined by indicators, almost inflexible practice for using and managing the LF, Usually donors defining the use and application by counterparts with little participation of stakeholders
Results Based Management	Kusek et.al. (WB 2004)	Emphasizes the importance of participation CREAM criteria for indicators: Clear, Relevant, Economic, Adequate and Monitorable Frequent and continuous information provide clues to problems and create opportunities to improve strategy. Analyzing and reporting performance findings is a critical step, determines what, when and to whom it is reported. The comparison over time is critical. Diagram based on frequent monitoring data helps to examine changes over time, to look for trends, directions etc. The more data points the more compelling the trends.	RBM goes beyond process indicators, up to expected results (outcomes) according to certain periods. Feedback is the process of ensuring that lessons learned are incorporated into new operations The use of M&E findings can promote knowledge and learning in government and organizations. Learning has been described as a continuous dynamic process of investigation where the key elements are experience, knowledge, access and relevance. Learning must be incorporated into the overall programming cycle through an effective feedback system.
Program Theory PT	P. Rogers and R. Hummelbrunner	PTs need SMART indicators in particular for MBR It provides added-value between different levels: local government to family level, or ministerial to local level Understand how change comes about, Understand program and its environment, Involve different stakeholders, Develop indicators appropriately, Disaggregate data, Choose appropriate format and incorporate assumptions, Capture different perspectives Change it as needed	For complex aspects, OVI should allow for documenting initial conditions and – in combination with assumptions – capture emerging phenomena. PT should be up-dated, if not it is fixed and thus prevent learning and adaptation for future work. Support knowledge translation, Adapt the program theory as needed Acknowledging that not everything can be anticipated is an important ingredient for staying attuned to reality. During monitoring specific attention should be paid to capture unexpected and unplanned effects.
Outcome Mapping OM	P. Rogers and R. Hummelbrunner	For interventions involving social change processes or capacity building plays a major role	Focus on one specific type of outcome i.e. changes in behavior of relationships, actions or activities of people, groups and organizations
	B. Williams and R. Hummelbrunner	OM is an iterative approach to planning, monitoring and evaluating social change initiatives. It shifts away from assessing the impact of a program, and toward changes in the behaviors, relationships, actions of people, groups and organizations. It is not based on linear cause-effect	Four guiding principles: Actor-centered development and behavior change – Continuous learning and flexibility emphasizing effective PML are cyclical, iterative and reflexive – Participation and accountability – Nonlinearity and contributions.
Empowerment	P. Rogers and R. Hummelbrunner	People are agents of their own development,	Therefore people are main stakeholders among others.
	D. Fetterman	EE is worked by people, participants and staff assisted by a facilitator Establish the mission, take stock on the current status and plan for the future	Key concepts: evidence, facilitator, cycles of reflection and action, community of learners and reflective practitioners 10 Principles: Improvement, community ownership, inclusion, democratic participation, social justice, community knowledge, evidence-based strategies, capacity building, organizational learning and accountability
	WB (2002)	Functioning and more inclusive basic services; More equitable access to markets and business services; Increased assets: Individual: material, human, social and political, Collective: voice, organization, representation	Participation, information, accountability and local organizational capacity. Improved governance and access to justice; Strengthened civil society; Strengthened poor people's organization, and freedom of choice
Accountability	M. Q. Patton	Traditional approach focused on and directed to external authorities and funders, whether resources were used as planned and whether targeted outcomes were attained. This a static and mechanical approach to accountability	It should place the emphasis on understanding, supporting, and documenting adaptations and their implications. Development occurs in dynamic contexts where even good plans will have to be adapted to changing realities

Most authors have emphasized the importance of learning as a result of the planning and monitoring activities and the feedback process to strengthen and empower local technical teams and community leaders and local authorities.

The situation of having different reporting periods for development and emergency projects allowed in the first case to elaborate all static databases and the dynamic Dashboard for reporting, whereas in emergencies the monitoring strategy was organized within the field monitoring stage based on the static and dynamic databases of the method achieving a higher frequency for the executive reporting.

Therefore, it was clear that the three stages of the method complement each other and build a basis for a tool to support the inclusion of Disaster Risk Reduction into regular programing, as it is suggested below.

In this way the dissertation has accomplished the demonstration of the two hypotheses.

7.2 Future Support to Local Technical Teams

7.2.1 Training and Capacity Building

The experiences documented here pointed out, that planning, monitoring and learning in projects for improving the wellbeing of communities in developing countries usually required a hands-on capacity building program for Local Technical Teams (LTTs) in coordination with regional technical teams or Non-governmental Organizations (NGO) with presence in the area.

An example of hands-on short capacity building course is discussed in this section, which was implemented with professionals, who worked at local levels on Planning and Monitoring development projects supporting LTTs of municipal governments and NGOs.

The methodology in those courses was based on the idea to benefit from working in groups in a constructivist format facilitating the students to create competencies of participation and management based on results as members of a community of learners appreciating diversity, other perspectives and recognizing boundaries.

The modular courses lasted in general 36 hours in periods and frequencies according to diverse scenarios. In some cases the course lasted a period of 4 weeks, 3 times per week and 3 hours each day as the example in Table 7.4 explained.

a. The capacity building of Local Technical Teams (LTTs) was organized with 4 teams of 5 technicians from different sectors each plus a fifth team of same size and with same focal points of the regional (RTT) level for coordination purposes. In this way, those teams (4 LTTs and 1 RTT) would learn to coordinate the planning and monitoring and at the same time the implementation of the projects in the communities and municipalities.

   It would be advisable to adjust the number of teams, so that the size of the course per facilitator is maintained around 25 participants.

b. For professional groups (e.g. Master of Science programs), the course could be organized with twenty five students divided in 5 groups of 5 students each.

Giesen presented the following table for understanding better the characteristics of a Constructivist approach for teaching a course:

Table 7.3 Contrast Between Traditional and Constructivist Classroom

Traditional Classroom	Constructivist Classroom
Begins with parts of the whole – emphasizes basic skills	Begins with the whole – expanding to parts
Strict adherence to fixed curriculum	Pursuit of student questions / interests
Textbooks and workbooks	Primary sources / manipulative materials
Instructor gives / students receive	Learning is interaction-building on what students already know
Instructor assumes directive, authoritative role	Instructor interacts / negotiates with students
Assessment via testing / correct answers	Assessment via student works, observations, points of view, texts. Process is as important as product
Knowledge is inert	Knowledge is dynamic / changes with experiences
Students work individually	Students work in groups

Giesen (n.d.)

Table 7.4 General Program for a 36-hour Modular Course in 12 Days and 4 Weeks

PERIOD		TOPIC AND ACTIVITIES
Week	Day	
1st		General Topic of the week: The new paradigm 2030 and some initial approaches. Organization of Working groups
	1	Topic: Presentation of details of the modular course, bibliography and form of evaluation • Power point presentation: Introduction to Planning, Monitoring, Systematizing and Learning • Explanation of Reading material and bibliography: Context, LFA, Program Theory & System Thinking • Introduction of participants and organization of Working groups and selection of their WG project
	2	Topic: Organization of Management Based on Results of the WG projects • Presentation to the class of WG project details • Discussion of the static databases and shortcomings: LF-Geo-population-Time table-Personnel Chart • Elements of the Log-frame (LF): Narrative goals, SMART targets, OVIs, MoV, Assumptions-Risks
	3	Topic: Practice and elaboration of the WG project static databases: • Geo-population list-map • Log-frame • Time table and Personal Chart
2nd		General Topic: Introduction to the Fusion Model
	4	Topic: Discussion of the results-oriented Log-frame Approach and the process-oriented OM's learning pathways • Introduction to the Outcome Mapping (OM) as a System Thinking approach • Preparation of the OM LF-Tree • Practice of WG on their project's LF-Tree
	5	Topic: Introduction to the Fusion Model: QAT-Plan • Explanation of the Fusion Model and its elements • The QAT-Plan as the fusion of the static databases: LF+Geopopulation-TT-PCh. • WG practice on their project QAT-Plan
	6	Topic: First general presentation on advances: • Groups 1 and 2 • Group 3 and 4 • Group 5 and Discussion of the session.
3rd		General Topic: The PlaMSyL Method: A Fusion Model Theory of Change as a flexible, innovative, simple practice oriented alternative for Planning, Monitoring and Learning
	7	Topic: Introduction to the PlaMSyL Method: Static and Dynamic Databases – Systematization Curves - Reporting • The Project Cycle and the three stages of application of the method. • Gathering of field information and Calculation of Output and Outcome Indicators • Qualification of Results according to targets or standards
	8	Topic: Hands-on WG Practice: elaboration of the DBs of the WG project • The static DBs: Geo-population list/map, LF, Timetable, Personnel Chart • The dynamic DBs: Field Data Table, Output-Outcome Table, Qualification of Results Matrix.
	9	Topic: Practice of WG on the dynamic databases according to the three stages of the method • Field data information • Calculation of the Output and Outcome indicators • Qualification of the Results
4th		General Topic: Final review on advantages and shortcomings of the PlaMSyL Method
	10	Topic: Introduction to the Systematization Curves and the executive monitoring and reporting • The Systematization Curves of the Indicators and their Qualification, • The types of short executive Reports • The Dashboard Report
	11	Topic: Final hands-on practice by WG • Final preparation of the Static Databases • Final preparation of the Dynamic Databases • Final preparation of the Systematization Curves and Executive Reports
	12	Topic: Final presentation of the WG projects • Final written and oral presentation of the WG projects with PlaMSyL tools e.g. static and dynamic databases, the QAT-Plan, Sys Curves and Dashboard Report • Discussion about advantages and shortcomings of the method in each WG project • Lesson learned and recommendations for future projects

Adaptation of former courses with LTTs. Guachalla 2007-2014

Giesen, (n.d) pointed out, the methodology generated knowledge from experience, using authentic tasks, settings, assessments, presenting their own projects holistically, emphasizing hands-on and real-world experiences.

The modular program would be appropriate to different cases and scenarios. For example the next table disaggregates the 36 hours in a program that can be reorganized in different ways, for a short summer semester or an intensive 2-week short course.

This is an approach for a 36-hrs training course, which could be organized for groups of local technicians and professionals, who want to enhance their knowledge to work with local organizations (Non-Governmental Organizations and local governments) and to support communities in developing countries. The time-period should be adapted to the working groups like the Field Support Officers in Sierra Leone or the Local Technical Teams in the 5-country regional project in Latin America.

The use of these program courses will depend on the context where the professionals work, who will take the course and the options to make one of the alternatives. The final content and results should be similar, and can be appropriate for local teams of Non-profits and governments or for university courses of professionals, who work in development.

Table 7.5 Content of a 36-hour Capacity 8Building Module for Project Teams & Managers Organized in Working-Groups

Hr	Activities	Material	Purpose	Group Preparation	Result
1	Personal introduction of participants	Who-What-When-Where-Why	To get to know everyone	Data: Name, Work, Studies, hobby, Interest in course	Participants' expectations are known
1	PPT general presentation of the module course	Powerpoint presentation	To know the course content and plan of important details	Reading course document	Detailed course plan is clear to participants
1	Detail explanation of the content of the course	Document of the course		Discussion about groups	
1	Organization of Group	List of participants	To learn to work in groups	Own projects details	5 working groups organized
1	Definition of the WG-project	Different personal projects	To work on a project together	Details of projects	One project chosen per group
1	Presentation to the classroom	Flipchart-Data-show	To know each other's project	One WG project details	WG-project content defined
1	Introduction to paradigm SDG-2030, challenges after MDG-2015. Top-down and bottom-up approaches	Statistics – UN-Unfinished Agenda, SDG 2030. Chen-MB.	To know features of new paradigm and approaches	Reading SGD-2030, MDGs, MB and Chen approaches	Participant know differences from RCT, bottom-up approach
1	Introduction to the LF and LF-Approach and the Paris Declaration based on the OECD-DAC standard	WB-SIDA-GTZ on LF-LFA UN-docs. Fetterman–	Participants review the details of the LFA and critics	Reading material on basic standards and approaches	Basic ideas of author proposals are known by participants. LF format and LFA advantages and disadvantages and alternatives
1	Introduction to new approaches in M&E: real world, developmental, empowerment, UN-HRBA, RBM&E	M. Patton, P. Rogers, J. Kusek R.Hummelbrunner, UN docs.	To know approaches to work on new paradigm SDG-2030	Reading material of different authors and planning tools	
1	Hands-on practice on methods for starting P-M-L	Authors' main points for WG	To produce own LFA	Preparation of the tools:	Each WG present the LF-LF-Tree and elements of systems to the class (stakeholders-stakes)
1	Use and difficulties of the LF, LF-Tree in a LFA within a non-linear, dynamic and complex context	WG own project details	They know the differences between MBR and Systems	MBR - Boundaries	
1				Relationships-Perspectives	
1	Introduction to Program Theory: LFA and OM	Details of P. Rogers et.al	To know various alternatives	Reading of Program Theory, LFA-OM – Fusion Model	Students know different models and can produce the Fusion Model of the WG project
1	Details of the Fusion Model	Details of R. Hummelbrunner	To join the useful details		
1	Introduction to other pathway: Systems Thinking	Details of M. Reynolds, B.Will.	To know other methodology	Reading on System Thinking	
1	Practice hands-on for the WG project Fusion Model	Last materials of WG-project	To learn the best of both approaches. Probably most used in developing countries	Reading of Fusion Model details and specific material of WG project	Each WG present to the class the WG-project´s Fusion Model scheme
1		The LFA and OM details			
1		Plus the Fusion Model details			
1	Explanation of the PlaMSyL Method	PPT and PlaMSyL document and usual project information e.g. timetable, personnel list etc	To use an alternative method for monitoring–systematizing - learning	Reading PlaMSyL document	Participants know the PlaMSyL Method details e.g. benefits and limitations
1	The Static Databases: Geo-pop.list/map-TT-PCh-LF				
1	The Dynamic Databases: FDT-OOT-QoR matrixes				
1	Practice (Hands-on) on the static and dynamic databases of WG projects: Geo-population list/map, Timetable, Personnel Chart, LF, FDT-OOT-QoR	WG own project information	The participants learn to adapt the information and use the PlaMSyL tools	WG prepare the material from their own project to adapt to the method	The static and dynamic DBs are ready to be used to practice the QAT-plan, Sys-Curves, Reports
1					
1					
1	The theory of change (Fusion Model) QAT-Plan	Static DBs to elaborate QAT-Pl.	To join LFA and OM	Reading QAT-Plan section	QAT-Plan is understood
1	The Sys-Curve	Information of the dynamic DB	To learn to draw project data	Reading Sys-Curve section	Participants design Sys-Curves
1	Reporting by Site, Sector OVI, Program comparison	Examples of case studies	To learn analysis & reporting	Reading examples of reports	Participants prepare reports
1	Practice (hands-on) of the QAT-Plan, Sys-Curves and Reporting of the results of the WG projects	WG own project's static and dynamic databases.	To prepare own QAT-Plan	WG data information	WG project QAT-Plan ready
1			To draw own project Sys-Cs.		WG project Sys-Curves ready
1			To prepare Dashboard report		WG project dashboard report
1	Final discussion about the PlaMSyL Method w. QAT-Plan as a Fusion Model Theory of Change in relation MBR and System Thinking. Progresses in the future		Comparing between the different projects their results on the use of the theory of change (Fusion Model) PlaMSyL method pros-cons and future improvements.		A better understanding of the use of the Fusion Model in a practice oriented approach
1					
1					
1	Final presentation of the WG projects and discussion about the first Fusion Model and the Results with the QAT-plan and the static and dynamic databases.				WG presentations on the static and dynamic DBs of their projects plus Sys-C. Reporting
1					
1					
36					

Adaptation of capacity building courses with FSOs, MTTs and university programs. Guachalla 2007-2014.

7.2.2 Guidelines and Policies for Supporting Local Governments to Plan, Monitor and Learn inserting Disaster Risk Reduction in Regular Programing

This section is subdivided in two sub-sections, first to recommend the national level of ministries and international organizations to design guidelines and policies for supporting Local Technical Teams (LTTs) to plan, monitor and learn in development projects and secondly for supporting local governments to include Disaster Risk Reduction into regular programing.

7.2.2.1 Recommendations for Guidelines and Policies for Planning, Monitoring and Learning at Local Level

Following the capacity building experiences with local and regional teams implemented during the regional project of Chapter 4 and before (Guachalla, 2011 and 2014), it was recommended to the national level to prepare guidelines and policies to ensure that this process for strengthening local teams would be standardized for all local governments.

To this respect, the American Planning Association recommended to plan with consensus according to a research article of Innes (2007). The author wrote after researching growth and environmental cases, that people sought shared frameworks for problems and discussed policy ideas, standards, and guidelines in the light of common criteria. Then they agreed to organize policies around the main concept, which served both environmental and development interests.

For writing guidelines and policies, consensus has to be built among stakeholders based on assumptions about the nature of knowledge, about the organization of interests and the nature of public interest. This means that the focal points of each sector from the national level (ministries) up to the community level should construct together the necessary policies and guidelines. This process could be intermediary between top-down and bottom-up approaches (Patton, 2012), thus the regional teams and local teams could work on the guidelines while the National teams on the policies to find consensus on both instruments and improve them accordingly.

For Héritier et.al. (2001), the issue of guidelines and policy-making starts on governance and the analysis made by the author and her team considered new approaches besides the one top-down from the national entity making the rules. Her team considered other alternatives, where the private and public institutions may start co-regulating themselves by levels that would expedite the process and help the national level to adequate policies to a more realistic situation.

Table 7.6 Target Development and Benchmarking: Implementation by Publication / Monitoring / Learning

Instruments: • Developing substantive targets; plus timetables; • Instruments to reach targets chosen by members (stakeholders); • Monitoring and publicizing performance • Exchanging information on policy measures; • Loss of reputation as a sanctioning instrument.
Actor involvement and participatory structure: • Targets defined by private actors (self-regulation; peer review); • Targets defined by public actors; • Targets jointly defined by public and private actors (co-regulation).

Héritier (2001).

Among the alternatives analyzed by Héritier et.al. the targeted development and benchmarking: implementation by publication / monitoring / learning may fit well to the topic of the dissertation because it was founded on the exchange of information, monitoring and learning. Targets had to be defined and measured clearly and the individual participants were willing to provide the necessary information for performance monitoring,

7.2.2.2 Recommendation to insert Disaster Risk Reduction into Regular Programing

The experiences discussed in this document have been on two big project scenarios on one side of development and resilience, and on the other side of emergencies and disasters. However, the Hyogo Framework for Action (2005) complemented by the

Sendai Framework (2015) recommended that Disaster Risk Reduction should be part of regular programing at local and regional levels.

So, governments in developing countries should come out with guidelines and policies to direct this arrangement. And the method for Planning, Monitoring, Systematizing and Learning (PlaMSyL method) could be used in the complex context at local level. The next paragraphs describe diagrams that help this purpose. The charts were elaborated with Local teams in a bottom-up approach in several workshops and hands-on trainings for strengthening the community resilience.

Table 7.7 Coordination by Sector and Regional Levels

Coordination Levels by Sector

Level/Sector	Education	WASH	Health	Protection	Local Development
• State:	Min.Edu.	Water	Health	Vicemin. Equal Opportunities	VIDECI
• **UNETE**	UNICEF	UNICEF	WHO UNICEF	UNICEF	UNDP
• Deptal:	SEDUCA	UNASBVI	SEDES	SEDEGES	CID
• NGOs	Plan Int.	Oxfam	World Vision	Safe Children	AeA
• Munic:	Educ. District	Technician	Hospital	Child Protection Office	**MTT**
Regions: subdivided by Inidenous Groups or by Districts					
• NGOs	Plant	Sumaj	CIAP	Promujer	Esperanza
Community	Educ. Unit.	CAPYS-Kall	Health Post	Volunteers	Com. Authority
Family	Student	Family	Child, Woman	Child	Prod - Family Income

Adapted from a workshop series with Local Technical Teams (2008-2010) on Disaster Risk Reduction, Guachalla (2011).

Following the Table 7.7, the level of Ministries supported by international agencies could be in charge to assist the strengthening of Local Technical Teams with specific guidelines and policies to ensure that the regional and local levels coordinate in order to plan, monitor and learn for better local services for families and communities, having in mind at the same time the risk of adverse events that can affect negatively the development of those communities.

The Cycle of Disaster Risk Reduction would help to differentiate what tasks of the cycle could be undertaken by the local technical teams and the other tasks to be coordinated with the regional and national levels to complete the cycle reinforcing the resilience of communities towards a sustainable development.

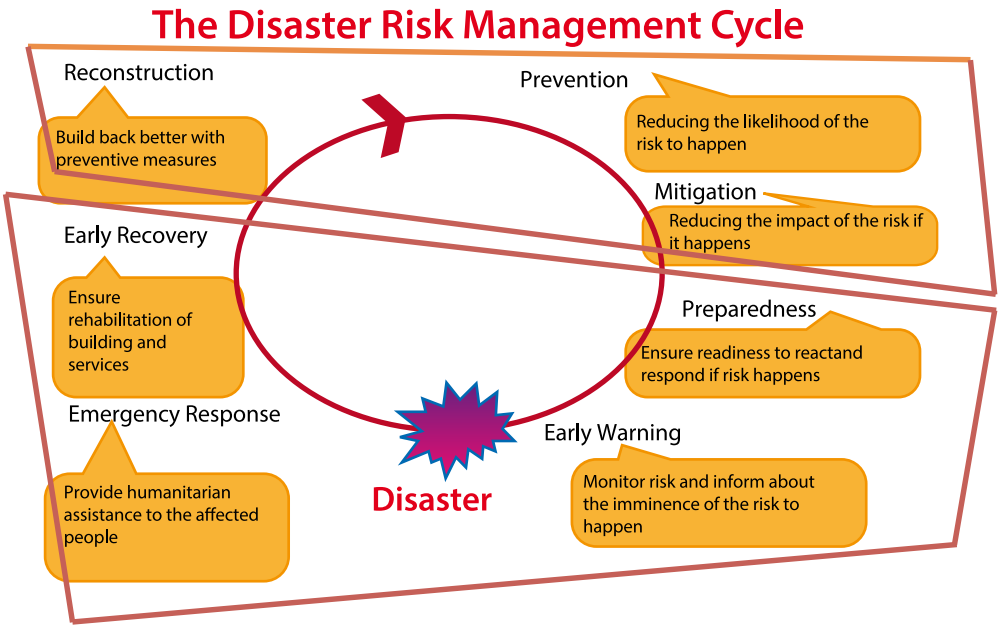


Figure 7.1 Cycle of Disaster Risk Reduction
ISDR, 2009 and adapted from UNICEF internal workshop 30.06.14. Guachalla, 2014.

The Figure 7.1 specified that the tasks of Preparation, Response and Early Recovery recommended in the document of the Core Commitments for Children (UNICEF, 2010), could be organized before an emergency for strengthening the community resilience whereas the tasks of Prevention, Mitigation and Reconstruction, which were more expensive could be inserted within the annual working plan of national ministries and an international agency and would be implemented by the regional level with support of an international non-profits in coordination with the local governments reinforced by national Non-Governmental Organizations, following the criteria and concepts for planning of Tables 7.1 and 7.7.

The Figure 7.2 was elaborated for a Macro and Micro Disaster Risk Reduction strategy, which corresponded later with the criteria of the paradigm of the sustainable goals 2030. This was based on the following process:

- The Sphere standards and UNICEF's Core Commitments for Children in Humanitarian Action were used to plan the tasks of Preparedness – Response and Early Recovery aiming toward resilient communities
- The other Disaster Risk Reduction elements of Prevention – Mitigation and Reconstruction were included in an annual plan with activities to achieve a sustainable development
- The terms of Macro and Micro were used in order to make a difference between the two parts of the strategy that complement each other in an annual plan. This would help local governments to start with the less expensive stages of Preparation – Response and Early Recovery, coordinating the others of Prevention – Mitigation – Reconstruction with the regional and national governments.
- This process could be the root for a joint plan, policy and guidelines to insert Disaster Risk Reduction into the regular development programing at the local level supported by the regional and national levels in developing countries.

By doing so the Figure 7.2 would follow the way of the Quality-Accountability-Transparency Plan (QAT Plan) along annual periods and the stages of activities – outputs – outcomes and impacts recommended for Local Technical Teams on the upper part of Micro Planning and similar for the regional and national teams on the lower part for Macro activities.

The monitoring and verification teams would be part of the local groups for reaching the communities, the regional teams for monitoring the local government activities and the national squad for monitoring the regional level, similar to the process explained in Figure 3.3.

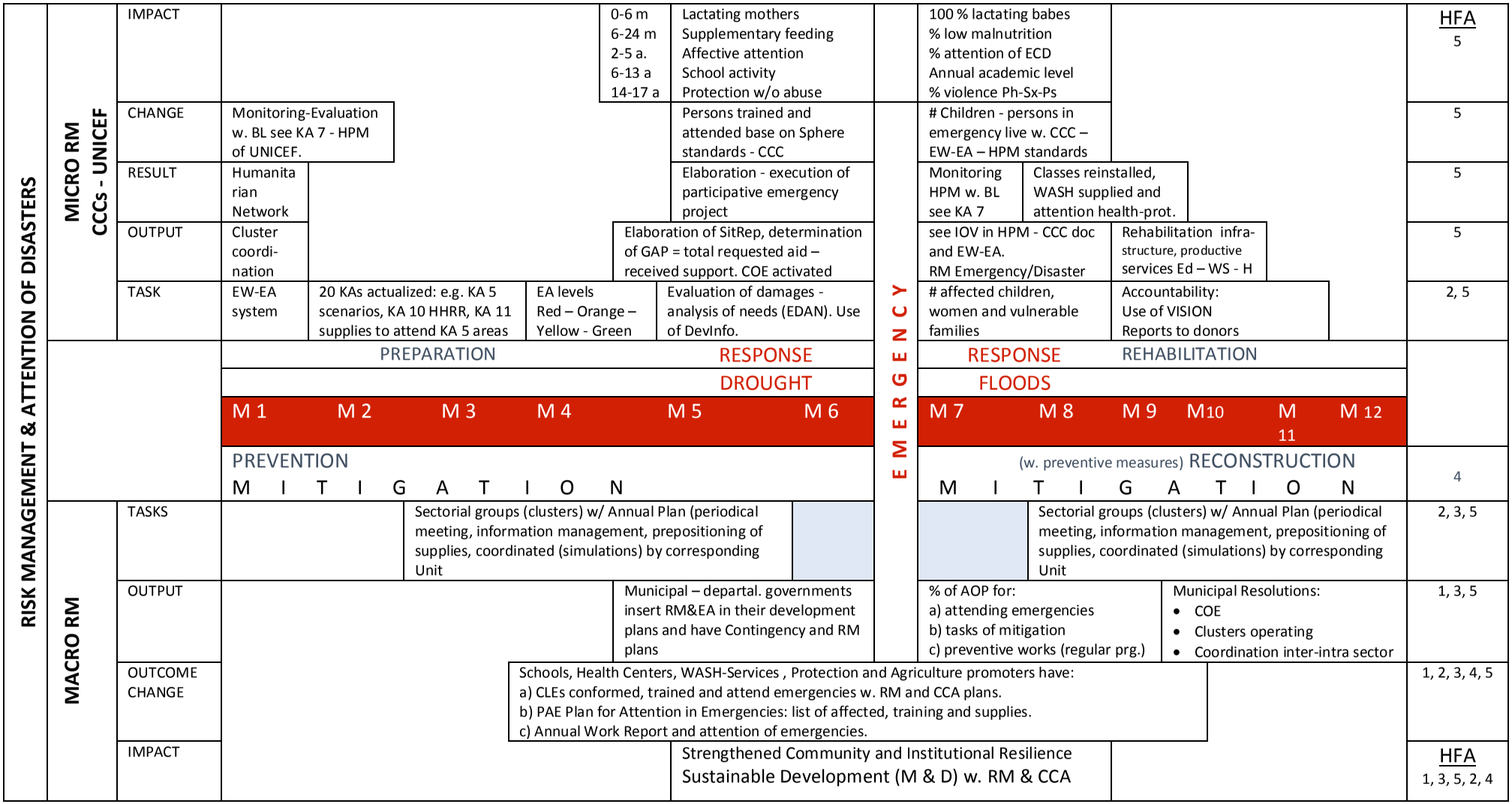


Figure 7.2 Macro and Micro Planning Strategy for Inserting Disaster Risk Reduction into Regular Development Programming

Adapted from the results of 22 workshops with 27 MTTs from Nov. 2008 till Dec. 2010. Guachalla, 2011.

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One valid alternative for the tasks of planning, monitoring and learning at local level would be the method for Project Planning, Monitoring, Systematizing and Learning (PlaMSyL method) that includes the stakeholders and activities for a participative approach with Local Technical Teams, community leaders, and supported by regional and national teams.

Finally, based on the proposed coordination between the three levels on Table 7.7, the implementation of the Macro and Micro Plan for inserting the Disaster Risk Reduction into regular development programming would joint all stakeholders and support the establishment of a national Planning and Monitoring & Evaluation System, which was recommended by the Paris Declaration in 2005.

7.3 Lessons Learnt and General Recommendations for Future Activities

The method was simple and could be transmitted to project field teams like the Honduran project team in 2013-14 or the Field Support Officers in Sierra Leone during the Ebola Emergency in 2015 with a hands-on training.

The PlaMSyL method has shown important potentials such as:

- The empowerment of the participants by maintaining a transparent information with quality and accountability facilitating opportune and appropriate decisions and for the participants to learn and improve their own projects in the future.
- For an easy implementation by local technical teams in municipalities or districts and Non-governmental Organizations even in many communities in developing countries where Excel is well used.
- To reduce the monitoring and reporting periods in emergencies and to adapt to the level of accountability, the requested frequency and the participation of stakeholders in particular community leaders, evacuation camp committees and families.
- To adequate the method to new technologies for real-data collection with the use of cellphones and the automation of the dynamic databases and Systematization curves for more opportune and appropriate reporting and decision making.

- To facilitate the reporting process with objective and transparent information, which can be verified by any stakeholder group.

The reporting in development projects is usually due every quarter or semester and in emergency projects commonly every month or in some cases every week and the extension and coverage of one or the other would require to have trained field officers to gather the field information and to transcribe it to the dynamic matrixes to calculate the indicators and their qualification enhancing the local teams to further elaborate the Systematization Curves and provided objective recommendations for better decision making of stakeholders and management at local level.

The experience of Sierra Leone with the use of the ODK application and the website ONA to obtain the field information using smart phones, was a demonstration that the method has this potential to become a Real Time Data collecting system.

This process should be improved in the future, to achieve a real empowerment of communities, the Local Technical Teams should be trained by the counterparts to monitor and report with the PlaMSyL method. This would require that the counterparts, e.g. NGOs count with field monitoring officers who use the method and can frequently support local teams on monitoring.

For achieving this strategy it is necessary to mobilize and to foster the awareness among managers of public, private and international organizations at the highest levels to indicate that monitoring of development and humanitarian performance is possible and it should focus on learning for a better service to targeted children, women, families and communities.

This internal institutional process should be facilitated in the near future for strengthening local government technical teams, who work closer to the worst off communities and can use the method as a tool for participative planning, monitoring and learning for better projects with Quality-Accountability-Transparency criteria at local level and for empowering communities what was recommended by the World Bank since the 90’s.

This should be supported by policies from the national level and Guidelines implemented in common work between the regional and local ranks in coordination with the national ministries and international agencies. In this way a middle approach would be attained between the bottom-up and top-down approaches, as M.Q. Patton (2012) suggested.

In order to improve the scope of the method for emergent complex context, it is recommended to insert in the QAT plan a feedback loop as P. Rogers (2012) did in her Program Theory pro poor, what would reinforce the use of the PlaMSyL method in those complex contexts.

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Annex 1. 4.1 Log-Frame of Regional Project

Title of the Action	Multi-level and inter-sectorial preparedness in communities of Bolivia, Peru, Guatemala, Honduras, and Cuba to strengthen the resiliency of children, women and families to be prepared and respond in emergencies with support of their communal, municipal and departmental authorities.			
Principal Objective	Families in Bolivia, Peru, Cuba, Guatemala and Honduras in the rural areas achieve a higher level of sustainable livelihood security preparing themselves for emergencies with support of their local communal, municipal and departmental authorities.			
	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
Specific Objective The families and communities in rural areas that are vulnerable to threats are strengthened in their resiliency and count on RM and AD tools and support from their municipal and departmental governments to confront emergencies, so that they do not turn into disasters nor affect their livelihoods, so that their development is sustained.	Children and women of 37.318 families in high risk municipalities (prone to flooding , drought, earthquake, hailstorm and freezes) in 18 departments and 62 municipalities and 405 communities of the 5 countries have been trained and assisted in and as a result are better able to coordinate, take action and respond in emergencies	1. 83,098 children 0-17 years [18,858 (H), 12,000 (C), 12,000 (G), 25,000 (B) and 15,240(P)] 2. 37,318 families: [8,138 (H), 7,500 (C), 4,800 (G), 10,530(B) and 6,350 (P)] 3. 94,181 women [20,283 (H), 15,322 (C), 12,000 (G) and 27,370 (B) and 19,206 (P)] 4. 15 different regions of high risk municipalities in 18 departments of 5 countries [2 H, 1 province C, 4 G, 4 B and 7 P] 5. 62 municipalities in areas prone to flooding, drought, earthquake, hailstorm, freezes, and hurricanes 6. 405 communities have specific preparedness results supported by the municipal - departmental governments 7. Regions: tropical, coast, Amazonian, dry areas, high plateau, valley 8. period of 9 months 9. 18 simulations for municipal - departmental coordination	Internal assessment report in 5th month. External final evaluation report at the end. Departmental team (Education-WASH-Health-Child Protection-Authority-Agricultural Service) report every 3 months on advance towards objective indicators UNICEF CO team verification report at 4th and 7th and end of the project.	The project is financed on time and the coordination among the three levels (municipal - departmental - national) works well and it is not interfered by political disturbances There is a good coordination between the municipal teams, the project team and the Education authorities Municipal teams can reach their high risk communities for replicating the DRR lessons The agricultural season and activities allow the villagers
Result 1 The departmental governments have been prepared and strengthened in order to allocate sufficient funding to support prevention activities in vulnerable communities and reconstruction activities with	The departmental government have the UGR strengthened and coordinating with the municipal technical teams on preparedness to respond to emergencies.	1. In 9 months: 2. 18 departments implement with 62 municipalities through the Units for RM tasks of the preparedness project in vulnerable communities, 3. 18 RM dptal. units monitor 62 municipal team replications at community level in 405 villages in 5 countries of the Action	Departmental report every 3 months on the advances towards the targets UNICEF CO verification report months 4th and 8th	

mitigation and prevention standards that ensure the preservation of livelihoods of vulnerable families and have supported the municipalities during the emergencies.		4. Organized 5 departmental sectorial working groups in 17 departments and 1 at provincial level with annual plan of activities and constitute the base of the departmental COE s (Centres of Operations in Emergencies)		enough time to participate in the trainings at village level Municipal governments are stable and participate in the project s from the beginning until the end. Risk that municipal annual budget is so low that is not enough for prepositioning a minimal list of supplies
Result 2 The municipal governments strengthened in RM and AD had undertaken the actions of mitigation and preparation with vulnerable families and their communities so that the implementation of their strategic development plans is sustainable.	62 Municipal governments count with trained technical multi-sectorial teams who replicate their practice at community levels and coordinate with departmental services and governance to attend large emergencies prepositioning humanitarian supplies according to sphere standards and CCC-UNICEF document.	In 9 months: 62 municipal inter-sectorial technical teams (multidisciplinary) trained on preparedness to respond to emergencies and 8 municipal education districts strengthened (C) Replications in 405 communities in 18 departments by 62 municipal teams. 62 Municipal governments coordinate at least three times with 18 departmental (provincial) levels 2 multi-sectorial working groups coordinated by the UGR (Unit of Risk Management) in 62 municipalities/5 countries Preposition of minimal list of supplies for the first week of an emergency in the municipal sections.	Municipal resolutions on COE, prepositioning humanitarian supplies and two working groups. Municipal bi-monthly report on replications and community status Departmental report on coordination with municipalities Municipal working table with annual work plan and bi-monthly report of UGR List of humanitarian prepositioned supplies, warehouse location and plan to use them in case of emergencies. UNICEF CO verification report every 3 months.	
Result 3 Vulnerable communities, their authorities, and families have been prepared and have participated in the tasks of prevention with the Government and completed sustainable mitigation activities with the municipal technical teams, so that the emergencies do not turn into disasters.	Communities in 62 municipalities have a Local Committee for Emergencies (CLE for the Spanish acronym) trained, professionals-technicians in charge to organize the families to respond emergencies and the families prepared to adequate respond to emergencies	in 9 months 405 Local Emergency Committees (LEC) trained and in charge to organize the families for emergencies in villages. At least 3 of 5 professionals-technicians have their one page action plans (PAE) for emergencies in 405 communities of 5 countries. 3 community meetings on DRR (every two months) with municipal technicians	Municipal report on # of LECs trained and working in their villages, which also includes the report on the one page technical emergency plan of each community technician UNICEF CO verification report every 3 months Education district report on the school workshops, use of reprinted materials and the results in each village	
Activities for Result 1	• DEPARTMENTAL: o Selection and training of Departmental Emergency Team (DET) in conjunction with the departmental authority o Replication of training in Municipalities of the project with DETs o Definition with municipal teams of a minimal budget for emergency preparation			

Activities for Result 2	• MUNICIPAL: o Selection and training of the municipal technical teams MTT with a plan to replicate in the vulnerable communities of each municipality o Replications of MTT training in the selected communities of the project o Organization of the municipal COE and 2 working sectorial (social and productive) platforms in coordination with the municipal unit of Preparedness	
Activities for Result 3	• COMMUNAL: (formation of the CLEs, a simulation in the schools in coordination with the sectorial technicians, and the own sectorial technician emergency one page plan) o Selection of the CLEs and replication training of the MTTs in communities o Simulation in the main community with school, health centre and other services in coordination with MTTs.	
		Pre-conditions The countries national civil defence authority are informed about the scope of the project.

Adapted from the Project Proposal, Guachalla, 2012

Annex 1. 4.2 Geo-Population List

Countries	Honduras	Guatemala	Cuba	Peru	Bolivia
Name of the Project	Multi-level and inter-sectorial preparedness in communities of Bolivia, Peru, Honduras, Guatemala, and Cuba to strengthen the resiliency of children, women and families to be prepared and respond in emergencies with support of their communal, municipal and departmental authorities				
Donor	Government of Belgium				
Start date	15.08.13	04.11.13 – Sept. 2013	Sept.2013	16.09.13	Dic. 2013
Conclusion date	15.05.14	May 2014	May 2014	15.05.14	May 2014
Report type	Final	Final	Final	Final	Final
Period of report	15.08.13 - 15.05.14	Sept.2013 - May 2014	Sept.2013 - May 2014	16.09.13 – 15.05.14	Dic.2013-May 2014
Date of report	15.06.14	13.06.14	18.06.14	24.06.14	June 2014
Geographic area Department: Municipalities: Communities:	**2 Departments**: Valle and Choluteca **6 Municipalities**: Nacaome, San Lorenzo, Alianza en Valle. Marcovia, Namasigue and El Triunfo in Choluteca. **43 communities i**n 6 municipalites.	**4 Departments**: Escuintla, Jutiapa, Petén and Santa Rosa. **16 Municipalities**: Puerto San José, Iztapa, Masagua, Nueva Concepción, La Gomera, Moyuta, Pasaco, Asunción Mita, Sayaxché, Las Cruces, Cuilapa, Santa María Ixhuatán, Oratorio, Nueva Santa Rosa, Chiquimulilla, Taxisco. **32 Communities**: Colonia La Nazareth, Barrio Los Encuentros, Aldea Buena Vista, Aldea El Esfuerzo Buena Vista, Aldea Los Lirios, Aldea El Astillero, Santa Marta El Mar, San José El Flor, Los Chatos, Cerro Colorado, Las Barritas, El Paraíso, El Salitrio, San Luis la Danta, Los Llanitos, Las Champas, Santa Elena Río Salinas, Caribe Río Salinas, Bethel, Bacadilla, Agua Zarca I, Los Esclavos, Cerro Chato, Media Legua, El Cacao, El Zarzal, Jumaytepeque, El Chupadero, Matamoros, Santa Rosa, Paso Hondo, La Avellana.		**1 Province** Sancti Spíritus **8 municipalities**: Sancti Spíritus, Cabaiguán, Yaguajay, Fomento, Trinidad, Jatibonico, Taguasco, La Sierpe **24 communities,** 29 schools	**4 Regions**: **7 Departments**: Apurímac, Cusco, Loreto, Ucayali, Callao y Lima **20 ➔ 22 Municipalities**: Abancay, Tamburco, Chalhuanca, Chuquibambilla, ~~Ayacucho~~, San Miguel, Lucre, Contamana, Punchana, Belén, San Juan Bautista, Iquitos, Callerla, Masisea, Padre Abad, Ventanilla, Cercado, Comas y La Victoria Más Vinchos, Carhuayo, Marcapata y Los Olivos **100 ➔ 117 communities**	**4 Departments**: Chuquisaca, Cochabamba, Potosí y Beni. **12 Municipalities**: Cochabamba. Arque, Tacopaya y Chimoré Chuquisaca: Macheretí, Huacaya, Muyupampa y Huacareta, Potosí: Toro toro, Chayanta, Karipuyo Beni: Loreto y San Ignacio de Moxos **230 ➔ 269 communities**
Planed population beneficiaries (planed results)	Total 40.690 persons in 6 municipalities, among them 18.858 children and 20.283 women	Total: 40,160 persons Families: 5,737 Men adults: 12,200 Women adults: 14,463 Children - adolescents: 13,497 EthnicGroups: a. Ladinos: 85% b. Keq'chí: 9.02 % c. Xinka: 3.48 % d. Lacandón: 2.5 %	34, 321 persons, 24 communities, 1470 boys and 1332 girls of 29 schools and 16736 women	38,100 persons, among them 15,240 children and adolescents, and 19206 women	52640 inhabitants, 25.000 children and 27370 women of 10.530 families
Counterpart	Mancommunity of Municipalities of Sur (NASMAR)	Executive Secretary-CONRED Foundation Nutrición de Centro América y Panamá FANCAP.	Ministry of Education, provincial government and municipal education head offices of Sancti Spíritus CITMA, Red Cross.	INDECI ONG Project Amigo ONG IPSA / Instituto de Promoción Social Amazónica Municipality Provincial de Coronel Portillo of the Región Ucayali APRODH, CEPRODENNNA, Gob.Reg. Apurimac and Mun. Indiana.	Humanitarias NOG Consorcium (CAHB) leader OXFAM GB

Adapted from the Regional Project Final Report. Guachalla, 2014

Annex 1. 4.3 Consolidated Qualification Table of the Indicators of Outputs-Outcomes of the Regional Project

ADRO DE AVANCE DE LOS INDICADORES REGIONALES HACIA LAS METAS(SMART) 3er.REPOI

Cod.	Lista indicadores	Projecto Plan (face)	Realizado Acumulado 2o.	Realizado Acumulado 3o.	Diferencia (falta)	Porcentaje de avance de los indicadroes	C 1-5
OE 1.1	niñas-os preparadas p.emerg.	80098	5922	22539		28%	2
OE 1.2	mujeres preparadas p.emerg.	95595	129	34875		36%	2
OE 1.3	familias preparadas p.emerg.	34618	0	13875		40%	2
RESULTADOS INTERMEDIOS O OUTCOMES						Promedio	3,6
RI1.1	EED participan en taller ETM	18	14	18	0	100%	5
RI1.2	UGR acompañan replicación	18	11	18	0	100%	5
RI1.3	UGR coordinan mesas dptls.	18	0,5	1,0	17,0	6%	1
RI2.1	ETIM entrenados en Preparac	62	37	60	2	97%	5
RI2.2	ETIM replican en comunidade	62	33	56	6	90%	5
RI2.3	reuniones de gob.dptles.c.6 m	62	19	52	10	84%	4
RI2.4	UTI coordinando con 6 ETIMs	62	3	23	39	37%	2
RI2.5	lista mínima suministros Hum	78	0	76	2	97%	5
RI3.0	Comunidades con Mapa de re	405	24	302	103	75%	4
IR 3.1	CODELs organizan a familias	405	32	396	9	98%	5
IR 3.2	técnicos comunales tienen su	1287	12	32	1255	2%	1
	o Comunidades c/Plan de Em	405	13	241	164	60%	3
IR 3.3	reuniones de miembros ETIM	1215	40	500	715	41%	2
PRODUCTOS O OUTPUTS:						Promedio	3,6
P 1.1	UTI seleccionada y capacitada	18	9	15	3	83%	4
P 1.2	UTI participa de talleres munic	18	6	24	-6	133%	5
P 1.3	UTI define % para preparación	18	0	4	14	23%	1
P 2.1	ETM seleccionados y capacit	62	40	68	-6	110%	5
P 2.2	ETMs con plan de replicación	62	22	56	6	90%	5
P 2.3	ETMs c/Cuadro RESUMEN d	62	0	3	59	5%	1
P 2.4	Municipios con COEM fortale	62	9	48	14	77%	4

Explicación de calificación	
bien	5
aceptable	4
regular	3
insuficiente	2
deficiente	1

Workshop of Lessons Learned in Panama May 2014 with information of the 3rd Consolidated Report. Guachalla, 2014

Annex 2. 5.1 List of the Humanitarian Performance Monitoring Proxy – Indicators

LIST OF INDICATORS ACCORDING TO THE HPM TOOLKIT

EDUCATION

			Description	variable 1	variable 2	OVI	UNIT
			EDUCATION VARIABLES TO CALCULATE THE HPM - OVI				

E2	# and % of school-aged children including adolescents reached by schools (including in schools in affected areas still functioning, re-opened schools and/or temporary facilities established)	Numerator = # schools still functioning + # schools re-opened + # temporary facilities X estimated average # of children per type of facility agreed at cluster level
		Denominator = total # school aged children in affected area (aged 4-6 years as target for pre-primary; aged 6-14 as target for basic; aged 15-18 as target for post-basic)
			Ratio between in school affected children and total affected schoolchildren	# of affected children in school activities	Total # of affected schoolchildren	OVI	UNIT

			DCC - Primary - Secondary / DCC - Primary - Secondary	A1	B1	A1/B1	%
	% of teachers attending to returned children in the school activities	N: # of teachers attending classrooms where affected children returned to classes D: # of total teachers providing classes in school	Ratio between # of teachers attending affected children and total # of teachers providing classes	# of teachers attending affected children in school activities	Total # of teachers providing classes in these schools		
			DCC - Primary - Secondary / DCC - Primary - Secondary	A2	B2	A2/B2	%
E1	Achievement of Cluster Coordination Milestones	See milestones in draft Cluster Coordination Milestones Tool					

WASH

			Description	variable 1	variable 2	OVI	UNIT
			WASH VARIABLES TO CALCULATE THE HPM - OVI				
W2	# and/or % of population with access to 15 liters of water per person per day	Numerator = # of water sources for each type of water source X # of people to be served by each type of water source Denominator = # people in the affected area	Ratio between daily volume of water supplied to families in an specific area and the # of people using it.	Volume of water supplied daily to an area	Total # of affected people in this area using this water	OVI	UNIT
				K1	L1	K1/L1	lt/per/day
W3	# and % of people living in faeces free environment AND # and % of people with access to appropriately designed toilets	Numerator = # of communal toilets established for women + # communal toilets established for men + # of family toilets X # of people targeted for each type of toilet Denominator for all = # of people in affected areas	Ratio between # of people using toilets and the # of toilets	# of persons in an specific area	# of toilets available to these persons	OVI	UNIT
				K2	L2	K2/L2	pers/toil.

	# and % of population provided with sanitation or hygiene kits or key hygiene items	Numerator = # Hygiene or sanitation kits or items distributed X # of people each kit or item is estimated to serve for one month (ideally agreed at cluster level with variations appropriate to context)
		Denominator = # of people in affected areas
			Ratio between # of hygiene kits distributed to families (for a month) and the # of these families	# of family hygiene kits (for one month)	# of affected families in the area	OVI	UNIT

				K3	L3	K3/L3	hyg.kit/fam

	Hand washing facility in toilets site	# of washing facilities (taps, water tanks) near toilets used by people after they use a toilet	# of washing facilities (taps, water tanks) near toilets used by people after using a toilet	# of persons in an specific area		OVI	UNIT
W4	# and % of population reached by mass information AND # and % of population reached by higher intensity face-to-face C4D activities	# of times that families have received messages on hygiene issues in monthly base	awareness indicator	M		M	wash-fac.
			awareness indicator	N		N	hyg.messg.
W5	# and/or % of children in school/learning programs with access to 3 liters of water per child per day (for drinking and hand washing)	Numerator = # of water sources in schools/learning spaces for each type of water source X estimated # of children to be served by each type of water source Denominator = estimated # children in schools/learning programs	Ratio between daily volume of water supplied to school children in an specific school and the # of school children using it.	Volume of water supplied daily to a school	Total # of school children using this water	OVI	UNIT
				K4	L4	K4/L4	lt/child/day
	# and % of children (male and female) with access to appropriately designed toilets at schools/learning spaces	Numerator = # of communal toilets established for girls + # communal toilets established for boys at schools or learning spaces X # of people targeted for each type of toilet Denominator for all = # of people in affected areas	Ratio between # of school children using toilets and the # of toilets available in school	# of school children in a school	# of toilets available in the school	OVI	UNIT
				K5	L5	K5/L5	pers/toil.
W1	Achievement of Cluster Coordination Milestones	See milestones in draft Cluster Coordination Milestones Tool					

NUTRITION:

NUTRITION VARIABLES TO CALCULATE THE HPM - OVI

			Description	variable 1	variable 2	OVI	UNIT

N4	# and/or % children 6-59 mo. with SAM enrolled in TFP or community-based programs or facilities	Numerator = # children 6-59 mo. with SAM enrolled or admitted in TFP or community based programs or facilities
		Denominator = estimated # children 6-59 mo. with SAM based on most recent survey
			Ratio between # of children 6-59 mo. with SAM enrolled in TFP and the total # of excrutinized SAM	# of children 6-59 mo. with SAM enrolled in TFP	total # of children 6-59 mo. with SAM	OVI	UNIT

				R1	S1	R1/S1	%
	# and/or % children 6-59 mo. with MAM enrolled in supplementary feeding programs	Numerator = # children 6-59 mo. with MAM enrolled in supplementary feeding programs Denominator = estimated # children 6-59 mo. with MAM based on most recent survey	Ratio between # of children 6-59 mo. with MAM enrolled in SFP and the total # of excrutinized MAM	# of children 6-59 mo. with MAM enrolled in SFP	total # of children 6-59 mo. with MAM	OVI	UNIT
N4	% of exits from targeted supplementary feeding programs of children 6-59 mo. who have: - Recovered (should before than 75%) and - Defaulted (should be less than 15%) - Died (should be less than 3%)	The time needed to achieve the exit indicators for a supplementary feeding program is 1 to 2 months. Exits from a feeding program are those no longer registered. The population of exited individuals is made up those who have defaulted, recovered (including those who are referred) and died.		R2	S2	R2/S2	%
			Monitoring of the leaving children SAM from TFP	# of children 6-59 mo. with SAM leaving the TFP in between 1-2 mo.		V	children leaving the TFP
N5	# and/or % of pregnant and lactating women in affected areas registered in a multi micronutrient supplementation	Numerator = # pregnant and lactating women registered	Ratio between # of pregnant and lactating women registered in a multi micronutrient supplementary program and estimated # of total pregnant and lactating women	# of pregnant and lactating women in a SFP of micro nutrients	total estimated # of pregnant and lactating women	OVI	UNIT

	program receiving multi-micronutrient supplement (or iron and folic acid)	Denominator = # estimated pregnant and lactating women			R3	S3	R3/S3	%
N1	Achievement of Cluster Coordination Milestones	See milestones in draft Cluster Coordination Milestones Tool						

CHILD PROTECTION

			PROTECTION VARIABLES TO CALCULATE THE HPM - OVI				
			Description	variable 1	variable 2	OVI	UNIT
CP3	# and % of children reached through child-friendly spaces in displacement sites and camps	Numerator=# of children enrolled in Child Friendly Spaces Denominator=# of children agreed as targeted "most vulnerable" overall in affected area.	Ratio between # of children enrolled in Child Friendly Spaces and # of children agreed as targeted	# of children enrolled in CFS	# of agreed targeted children	OVI	UNIT
				Y1	Z1	Y1/Z1	%
	% of trained persons working in the CFS	N: # of trained personnel in CFS D: total # of personnel in CFS	Ratio between # of trained personnel and total personnel in CFS	# of trained personnel in CFS	# of personnel in CFS	OVI	UNIT
				Y2	Z2	Y2/Z2	%
CP4	# and % of separated children in emergencies reunified	Numerator = # of separated children reunified Denominator = total # of separated identified since beginning of crisis	Ratio between # of separated children reunified and total # of separated children	# of reunified children	total # of separated children	OVI	UNIT
				Y3	Z3	Y3/Z3	%

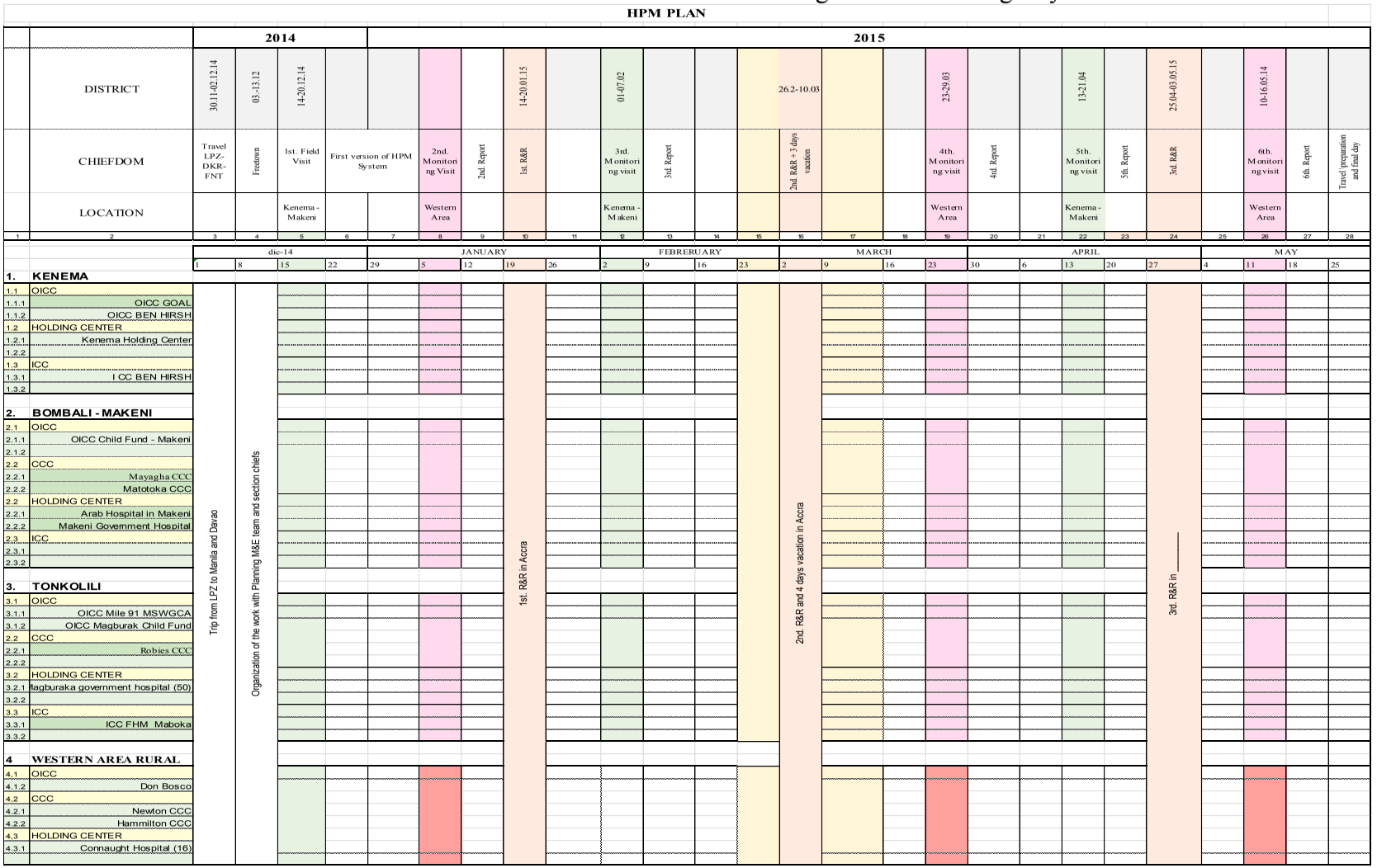
CP6	# and % children enrolled in psycho-social activities	Numerator = # children enrolled in CP programs that have integrated PSS
		Denominator = total child population
			Ratio between # of children provided additional PSS support intervention / by total affected child population	# of children provided additional PSS support	total # of affected child population	OVI	UNIT

				Y4	Z4	Y4/Z4	%
CP1	Achievement of Cluster Coordination Milestones	See milestones in draft Cluster Coordination Milestones Tool					

In the sector of WASH, instead of the two indicators of water and toilettes in the schools, the team used two indicators for cleanness of the care centers, because the schools were closed to avoid a larger outbreak.

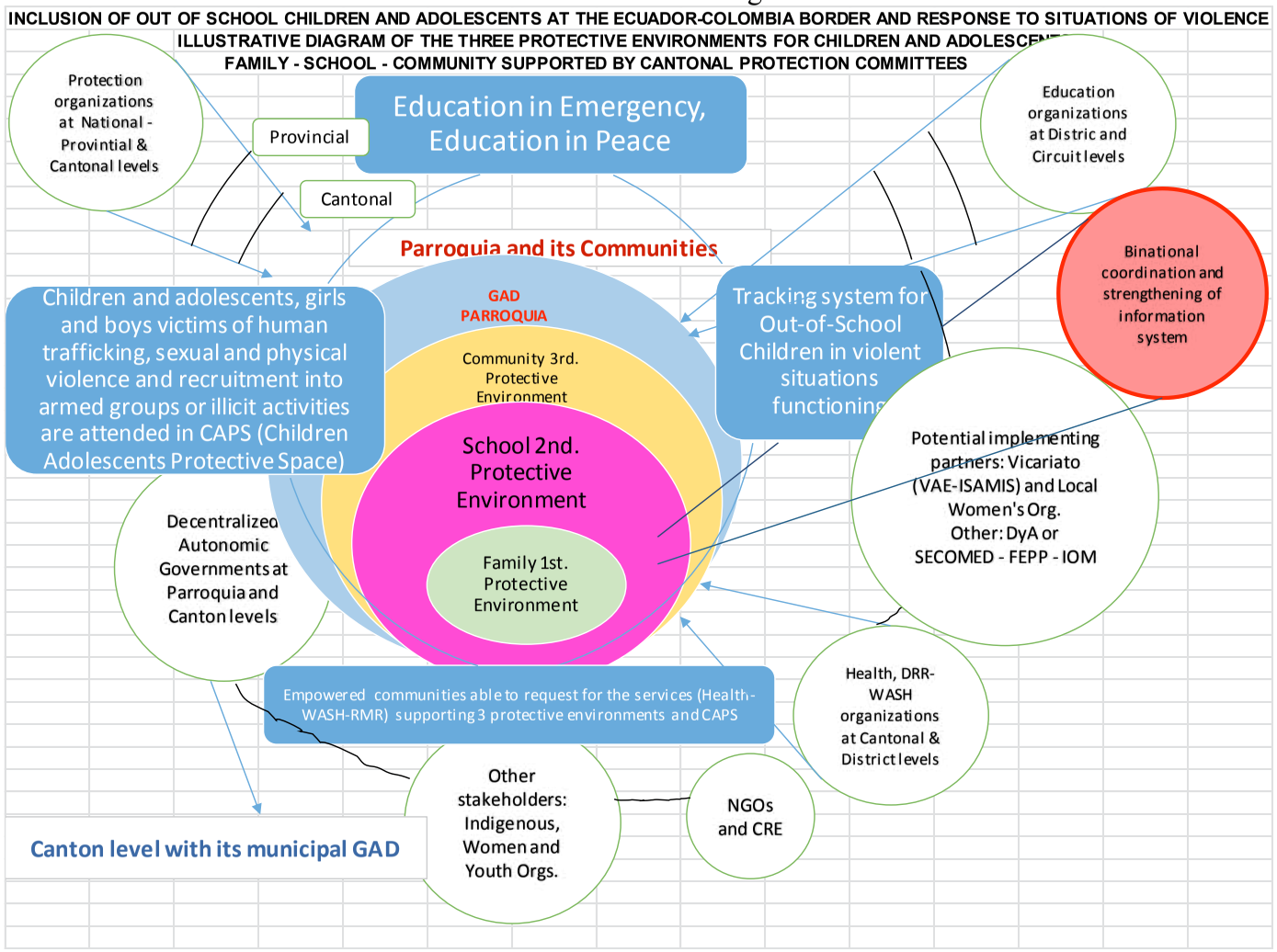
Adapted from the UNICEF Humanitarian Performance Monitoring Toolkit. Guachalla, 2013.

Annex 2. 5.2 Initial Time Table for Monitoring the Ebola Emergency



Adapted from the Final Mission Report in Sierra Leone. Guachalla, 2015.

Annex 3. 6.1 Venn Diagram



Adapted from the Final Project Proposal for ECHO. Guachalla et.al. 2016.

Annex 3. 6.2 Geo-Population List

PROVINCE	CANTON	PARROQUIA	Total project communities	Total school attending children	Out of School children	Total school age children 3-17	Total population in communities	Families	Parro-quias	Teachers	Total population by parroquia 2016	Population aprox. 3-17 yr. by canton	Total population-canton 2016	Code Parrroquia
Esmeraldas	Eloy Alfaro	Atahualpa	2	149	37	186	532	89	1	7	1613	16412	44077	80252
		Borbón	2	285	71	356	1.018	170	1	14	8536			80253
		San José de Cayapas	4	321	80	401	1.146	191	1	15	1678			80263
		Santo Domingo	2	137	34	171	489	82	1	7	2145			80259
		Telembi	23	1787	447	2.234	6.382	1.064	1	84	6255			80261
	Subtt Eloy Alfaro		33	2.679	670	3.349	9.568	1.595	5	126	20227	16412	44077	
	San Lorenzo	Alto Tambo	2	34	9	43	121	20	1	2	2404	19726	54584	80551
		Mataje	1	111	28	139	396	66	1	5	1895			80557
		Santa Rita	1	76	19	95	271	45	1	4	2106			80559
		Tululbi	4	295	74	369	1.054	176	1	14	2949			80561
	Subtotal San Lorenzo:		8	516	129	645	1.843	307	4	24	9354	19726	54584	
Total Esmeraldas:			41	3.195	799	3.994	11.411	1.902	9	151	29581	36138	98661	
Sucumbios	Lago Agrio	Dureno	3	135	34	169	482	86	1	6	3287	36008	109408	210152
		El Eno	7	259	65	324	925	165	1	12	7914			210153
		Jambeli	3	96	24	120	343	61	1	5	3953			210157
		Pacayacu	3	48	12	60	171	31	1	2	9837			210156
		Santa Cecilia	8	334	84	418	1.193	213	1	16	7503			210158
	Subt. Lago Agrio:		24	872	218	1.090	3.114	556	5	41	32494	36008	109408	
	Putumayu	Palma Roja	6	124	31	155	443	79	1	6	5280	4631	13587	210351
		Puerto Bolivar	1	45	11	56	161	29	1	2	373			210352
		Puerto Rodriguez	3	67	17	84	239	43	1	3	662			210353
	Total Putumayu:		10	236	59	295	843	151	3	11	6315	4631	13587	
	Cuyabeno	Cuyabeno	3	77	19	96	275	49	1	6	401	2283	7301	210751
		Aguas Negras	1	11	3	14	39	7	1	1	1497			210752
	Subto. Cuyabeno:		4	88	22	110	314	56	2	7	1898	2283	7301	
Total Sucumbios:			38	1.196	299	1.495	4.271	763	10	59	40707	42922	130296	
Target populations in 79 communities:			79	4.391	1.098	5.489	15.682	2.665	19	210	70288	79060	228957	
										families:	12551	35%	S. children	

Adapted from the Final Project Proposal to ECHO, Guachalla et.al. 2016.

Annex 3. 6.3 Time Table

	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13	M 14	M 15	M 16	M 17	M 18	M 19	M 20	M 21	M 22	M 23	M 24
Result 1 Families of out-of-school and attending school children and adolescents are supported by trained teachers, parent´s school committees (JEPF) and by CAPS community leaders to live with their children and adolescents in 3 protective environments, denouncing the situations of violence to the community government council and to the monthly community assembly																								
1.1 Municipal and Parroquia personnel on Education and Child Protection are trained for supporting the community and parroquia schools to include out-of-school children in 3 protective environments through the schools and CAPS.																								
1.2 Participative research-action community baseline																								
1.3 Community committees on Education (JEPFs) and Child Protection (CAPS) are selected and trained for including Out-of-School and abused children within 3 protective environments through the schools and CAPS.																								
1.4 The community and parroquia authorities, services and committees start attending out-of-school children through the schools and CAPS 2-3 times per week by turns first with the field team technician and then alone																								
1.5 5 strengthened municipal GAD technicians of corresponding sectors accompany the supervisors of the project field team and support in periods of 3 months the monitoring of 19 GADs of parroquias and the achievements of 79 community committees and report of advances of the indicators of the result R1 every six months.																								
Result 2 Strengthened school communities (teachers, JEPFs and students) and CAPS leaders coordinate with health, WASH and RM committees, the denounce of the situations of violence against out-of-school and school attending children and adolescents to the community government council and the community assembly																								
2.1 Municipal and parroquia services personnel on Health, RM and WASH are trained for supporting and monitoring the services personnel and community committees to support the project in the schools and CAPS																								
2.2 All 3 sectors health, WASH and RM of the community committees support at least every two weeks the schools with the project personnel and a technician of parroquia																								
2.3 The families of communities and parroquias are informed through C4D (Communication for Development) messages about the 3 Protective Environments and achievements to have well informed community committees of situations of violence against out-of-school and school attending children and adolescents																								
2.4 5 municipal GADs monitor the replication of 19 parroquias and 79 community committees every 3 months with the supervisors of the field team and report of advances of Result 2 to UNICEF every semester.																								
Result 3 Strengthened cantonal protection organizations (JCP: Junta cantonal de Protection) support the tracking system of out-of school children and adolescents in situation of violence and accompany every month the parroquia GAD and the CAPS leaders in denouncing the cases of violence to the community government council and the monthly community assembly																								
3.1 Training of the project field team personnel on the topics of the R3 (situations of violence, illegal traffic, armed recruitment, sexual abuse) and out-of-school children and adolescents tracking system in situations of violence.																								
3.2 Training of the cantonal protection organization (JCP) personnel on the topics of the R3 (situations of violence, illegal traffic, armed recruitment, sexual abuse) and out-of-school children and adolescents tracking system in situations of violence																								
3.3 Training and accompaniment of community leaders by JCP and project field team																								
3.4 Monthly information required by the tracking system at community and parroquia levels of the out-of-school children and adolescents in situation of violence																								
3.5 Every three months the Municipal GAD accompany the project supervisors to monitor about the advances of the indicators of the Result R3 and prepares a report on advances every semester.																								

Adapted from the Final Project Proposal to ECHO. Guachalla et.al. 2016.

Annex 4. Glossary of Key Terms on Monitoring & Evaluation and Results-Based Management

This glossary has been developed by the OECD/DAC (Development Assistance Committee of the Organization of Economic Cooperation and Development) and completed in 2002.

ACCOUNTABILITY Obligation to demonstrate that work has been conducted in compliance with agreed rules and standards or to report fairly and accurately on performance results vis-àvis mandated roles and/or plans. This may require a careful, even legally defensible, demonstration that the work is consistent with the contract term.
Note: Accountability in development may refer to the obligations of partners to act according to clearly defined responsibilities, roles and performance expectations, often with respect to the prudent use of resources. For evaluators, it connotes the responsibility to provide accurate, fair and credible monitoring reports and performance assessments. For public sector managers and policy-makers, accountability is to taxpayers/citizens.

ACTIVITY Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilized to produce specific outputs.
Related term: Development intervention.

ANALYTICAL TOOLS Methods used to process and interpret information during an evaluation.

APPRAISAL An overall assessment of the relevance, feasibility and potential sustainability of a development intervention prior to a decision of funding.
Note: In development agencies, banks, etc., the purpose of appraisal is to enable decision-makers to decide whether the activity represents an appropriate use of corporate resources.
Related term: Ex-ante evaluation.

ASSUMPTIONS Hypotheses about factors or risks which could affect the progress or success of a development intervention.
Note: Assumptions can also be understood as hypothesized conditions that bear on the validity of the evaluation itself, e.g. about the characteristics of the population when designing a sampling procedure for a survey. Assumptions are made explicit in theory based evaluations where evaluation tracks systematically the anticipated results chain.

ATTRIBUTION The ascription of a causal link between observed (or expected to be observed) changes and a specific intervention.
Note: Attribution refers to that which is to be credited for the observed changes or results achieved. It represents the extent to which observed development effects can be attributed to a specific intervention or to the performance of one or more partner taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks.

AUDIT An independent, objective assurance activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to assess and improve the effectiveness of risk management, control and governance processes.
Note: A distinction is made between regularity (financial) auditing, which focuses on compliance with applicable statutes and regulations; and performance auditing, which is concerned with relevance, economy, efficiency and effectiveness. Internal auditing provides an assessment of internal controls undertaken by a unit reporting to management while external auditing is conducted by an independent organization.

BASE-LINE STUDY An analysis describing the situation prior to a development intervention, against which progress can be assessed or comparisons made.

BENCHMARK Reference point or standard against which performance or achievements can be assessed.
Note: A benchmark refers to the performance that has been achieved in the recent past by other comparable organizations, or what can be reasonably inferred to have been achieved in the circumstances.

BENEFICIARIES The individuals, groups, or organizations, whether targeted or not, that benefit, directly or indirectly, from the development intervention. *Related terms:* Reach, target group.

CLUSTER EVALUATION An evaluation of a set of related activities, projects and/or programs.

CONCLUSIONS Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and
more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.

COUNTERFACTUAL The situation or condition which hypothetically may prevail for individuals, organizations, or groups were there no development intervention.

COUNTRY PROGRAM EVALUATION/COUNTRY ASSISTANCE EVALUATION Evaluation of one or more donor's or agency's portfolio of development interventions, and the assistance strategy behind them, in a partner country.

DATA COLLECTION TOOLS Methodologies used to identify information sources and collect information during an evaluation.
Note: Examples are informal and formal surveys, direct and participatory observation, community interviews, focus groups, expert opinion, case studies, and literature search.

DEVELOPMENT INTERVENTION An instrument for partner (donor and non-donor) support aimed to promote development.
Note: Examples are policy advice, projects, and programs.

DEVELOPMENT OBJECTIVE Intended impact contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people via one or more development interventions.

ECONOMY Absence of waste for a given output.
Note: An activity is economical when the costs of the scarce resources used approximate the minimum needed to achieve planned objectives.

EFFECT Intended or unintended change due directly or indirectly to an intervention.
Related terms: Results, outcome.

EFFECTIVENESS The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
Note: Also used as an aggregate measure of (or judgment about) the merit or worth of an activity, i.e. the extent to which an intervention has attained, or is expected to attain, its major relevant objectives efficiently in a sustainable fashion and with a positive institutional development impact.
Related term: Efficacy.

EFFICIENCY A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.

EVALUABILITY Extent to which an activity or a program can be evaluated in a reliable and credible fashion.
Note: Evaluability assessment calls for the early review of a proposed activity in order to ascertain whether its objectives are adequately defined and its results verifiable.
* *Ideally, an evaluability assessment should be made when a development intervention is planned. However, evaluability must also be assessed again as a prelude to evaluation.*

EVALUATION The systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to

determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.
Evaluation also refers to the process of determining the worth or significance of an activity, policy or program. An assessment, as systematic and objective as possible, of a planned, on-going, or completed development intervention.
Note: Evaluation in some instances involves the definition of appropriate standards, the examination of performance against those standards, an assessment of actual and expected results and the identification of relevant lessons.
Related term: Review.
** The definition of evaluation in Sida's Evaluation Policy differs only slightly from the DAC definition: An evaluation is a careful and systematic retrospective assessment of the design, implementation, and results of development activities*.

EX-ANTE EVALUATION An evaluation that is performed before implementation of a development intervention.
Related terms: Appraisal, quality at entry.

EX-POST EVALUATION Evaluation of a development intervention after it has been completed.
Note: It may be undertaken directly after or long after completion. The intention is to identify the factors of success or failure, to assess the sustainability of results and impacts, and to draw conclusions that may inform other interventions.

EXTERNAL EVALUATION The evaluation of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations.

FEEDBACK The transmission of findings generated through the evaluation process to parties for whom it is relevant and useful so as to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations and lessons from experience.

FINDING A finding uses evidence from one or more evaluations to allow for a factual statement.

FORMATIVE EVALUATION Evaluation intended to improve performance, most often conducted during the implementation phase of projects or programs.
Note: Formative evaluations may also be conducted for other reasons such as compliance, legal requirements or as part of a larger evaluation initiative.
Related term: Process evaluation.

GOAL The higher-order objective to which a development intervention is intended to contribute.
Related term: Development objective.

IMPACTS Positive and negative, primary and secondary long term effects produced by a development intervention, directly or indirectly, intended or unintended.
** As noted in Chapter 2, the word is widely used in a more comprehensive sense that includes both short and long-term effects. In this manual, it is used in the broader as well as in the more narrow sense defined by the Glossary.*

INDEPENDENT EVALUATION An evaluation carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention.
Note: The credibility of an evaluation depends in part on how independently it has been carried out. Independence implies freedom from political influence and organizational pressure. It is characterized by full access to information and by full autonomy in carrying out investigations and reporting findings.
** This manual distinguishes between two types of independent evaluation. In the one case the evaluators are independent of the evaluated activities and have no stake in the outcome of the study. In the other case, there is a further requirement that the evaluation is also commissioned by an organization that is independent of the evaluated activities.*

INDICATOR Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.

INPUTS The financial, human, and material resources used for the development intervention.

INSTITUTIONAL DEVELOPMENT IMPACT The extent to which an intervention improves or weakens the ability of a country or region to make more efficient, equitable, and sustainable use of its human, financial, and natural resources, for example through: (a) better definition, stability, transparency, enforceability and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Such impacts can include intended and unintended effects of an action.

INTERNAL EVALUATION Evaluation of a development intervention conducted by a unit and/or individuals reporting to the management of the donor, partner, or implementing organization.
Related term: Self-evaluation.

JOINT EVALUATION An evaluation to which different donor agencies and/or partners participate.
Note: There are various degrees of "jointness" depending on the extent to which individual partners co-operate in the evaluation process, merge their evaluation resources and combine their evaluation reporting. Joint evaluations can help overcome attribution problems in assessing the effectiveness of programs and strategies, the complementarity of efforts supported by different partners, the quality of aid co-ordination, etc.

LESSONS LEARNED Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.

** As the term is understood in this manual, the degree of generalization of a lesson varies from case to case. As the conditions for development co-operation vary, illuminating attempts at generalization are often restricted to a particular type of context or mode of intervention.*

LOGICAL FRAMEWORK (LOGFRAME) Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention.
Related term: Results-based management.
** It should be noted that logframe analysis (LFA) is one of several closely related types of analyses that focus on the chain of cause and effect underlying the evaluated intervention. Programme logic models, theories of action, performance frameworks, project theories, and development hypotheses are all members of the same family as the logframe. In this manual, the term intervention logic serves as a blanket term.*

META-EVALUATION The term is used for evaluations designed to aggregate findings from a series of evaluations. It can also be used to denote the evaluation of an evaluation to judge its quality and/or assess the performance of the evaluators.

MID-TERM EVALUATION Evaluation performed towards the middle of the period of implementation of the intervention.
Related term: Formative evaluation.

MONITORING A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.
Related term: Performance monitoring, indicator.

OUTCOME The likely or achieved short-term and medium-term effects of an intervention's outputs.

Related terms: Result, output, impact, effect.
** Among evaluators the word outcome is also frequently used in a general sense where it is more or less synonymous with the word effect. When it is used in this sense, distinctions are made between short, medium, and long-term outcomes.*

OUTPUTS The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

PARTICIPATORY EVALUATION Evaluation methods through which representatives of agencies and stakeholders (including beneficiaries) work together in designing, carrying out and interpreting an evaluation.
** In this manual we distinguish between participatory evaluations and participatory evaluation methods. An evaluation may use participatory methods, and still not qualify as a fully participatory evaluation. This distinction is further clarified in Chapter 1.*

PARTNERS The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives.
Note: The concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations. Partners may include governments, civil society, non-governmental organizations, universities, professional and business associations, multilateral organizations, private companies, etc.

PERFORMANCE The degree to which a development intervention or a development partner operates according to specific criteria/standards/guidelines or achieves results in accordance with stated goals or plans.

PERFORMANCE INDICATOR A variable that allows the verification of changes in the development intervention or shows results relative to what was planned.
Related terms: Performance monitoring, performance measurement.

PERFORMANCE MEASUREMENT A system for assessing performance of development interventions against stated goals.

Related terms: Performance monitoring, indicator.

PERFORMANCE MONITORING A continuous process of collecting and analyzing data to compare how well a project, program, or policy is being implemented against expected results.

PROCESS EVALUATION An evaluation of the internal dynamics of implementing organizations, their policy instruments, their service delivery mechanisms, their management practices, and the linkages among these.
Related term: Formative evaluation.
* *As the term is understood in this manual, a process evaluation may also deal with outputs and other intermediary results.*

PROGRAM EVALUATION Evaluation of a set of interventions, marshaled to attain specific global, regional, country, or sector development objectives.
Note: A development program is a time bound intervention involving multiple activities that may cut across sectors, themes and/or geographic areas.
Related term: Country program/strategy evaluation.

PROJECT EVALUATION Evaluation of an individual development intervention designed to achieve specific objectives within specified resources and implementation schedules, often within the framework of a broader program.
Note: Cost benefit analysis is a major instrument of project evaluation for projects with measurable benefits. When benefits cannot be quantified, cost effectiveness is a suitable approach.
* *As the concept is understood in this manual, there are many approaches to project evaluation. Cost-benefit analysis and analyses of cost-effectiveness are important tools for economic evaluation focussing on questions of efficiency.*

PROJECT OR PROGRAM OBJECTIVE The intended physical, financial, institutional, social, environmental, or other development results to which a project or program is expected
to contribute.

PURPOSE The publicly stated objectives of the development program or project.

QUALITY ASSURANCE Quality assurance encompasses any activity that is concerned with assessing and improving the merit or the worth of a development intervention or its compliance with given standards. *Note:* Examples of quality assurance activities include appraisal, results-based management, reviews during implementation, evaluations, etc. Quality assurance may also refer to the assessment of the quality of a portfolio and its development effectiveness.

REACH The beneficiaries and other stakeholders of a development intervention.
Related term: Beneficiaries.

RECOMMENDATIONS Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions.

RELEVANCE The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.
Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.

RELIABILITY Consistency or dependability of data and evaluation judgements, with reference to the quality of the instruments, procedures and analyses used to collect and interpret evaluation data.
Note: Evaluation information is reliable when repeated observations using similar instruments under similar conditions produce similar results.

RESULT The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.
Related terms: Outcome, effect, impact.

RESULTS CHAIN The causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts, and feedback. In some agencies, reach is part of the results chain.
Related terms: Assumption, results framework.

RESULTS FRAMEWORK The program logic that explains how the development objective is to be achieved, including causal relationships and underlying assumptions.
Related terms: Results chain, logical framework.

RESULTS-BASED MANAGEMENT (RBM) A management strategy focusing on performance and achievement of outputs, outcomes and impacts.
Related term: Logical framework

REVIEW An assessment of the performance of an intervention, periodically or on an ad hoc basis.
Note: Frequently "evaluation" is used for a more comprehensive and/or more in-depth assessment than "review". Reviews tend to emphasize operational aspects. Sometimes the terms "review" and "evaluation" are used as synonyms.
Related term: Evaluation.

RISK ANALYSIS An analysis or an assessment of factors (called assumptions in the logframe) affect or are likely to affect the successful achievement of an intervention's objectives. A detailed examination of the potential unwanted and negative consequences to human life, health, property, or the environment posed by development interventions; a systematic process to provide information regarding such undesirable consequences; the process of quantification of the probabilities and expected impacts for identified risks.

SECTOR PROGRAM EVALUATION Evaluation of a cluster of development interventions within one country or across countries, all of which contribute to the achievement of a specific development goal.

Note: A sector includes development activities commonly grouped together for the purpose of public action such as health, education, agriculture, transport etc.

SELF-EVALUATION An evaluation by those who are entrusted with the design and delivery of a development intervention.

STAKEHOLDERS Agencies, organisations, groups or individuals who have a direct or indirect interest in the development intervention or its evaluation.

SUMMATIVE EVALUATION A study conducted at the end of an intervention (or a phase of that intervention) to determine the extent to which anticipated outcomes were produced. Summative evaluation is intended to provide information about the worth of the program.
Related term: Impact evaluation.

SUSTAINABILITY The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.

TARGET GROUP The specific individuals or organisations for whose benefit the development intervention is undertaken.

TERMS OF REFERENCE Written document presenting the purpose and scope of the evaluation, the methods to be used, the standard against which performance is to be assessed or analyses are to be conducted, the resources and time allocated, and reporting requirements. Two other expressions sometimes used with the same meaning are “scope of work” and “evaluation mandate”.

THEMATIC EVALUATION Evaluation of a selection of development interventions, all of which address a specific development priority that cuts across countries, regions, and sectors.

TRIANGULATION The use of three or more theories, sources or types of information, or types of analysis to verify and substantiate an assessment.
Note: By combining multiple data-sources, methods, analyses or theories, evaluators seek to overcome the bias that comes from single informants, single-methods, single observer or single theory studies.

VALIDITY The extent to which the data collection strategies and instruments measure what they purport to measure.

Complementary Glossary of terms from the UN-Habitat doc on Human Rights Based Approach of 9 Dec. 2014

Data Disaggregation
Availability of disaggregated data is essential to be able to identify the most vulnerable groups and diverse needs. Commonly marginalized groups include: children and adolescents; women (across groups); persons with disabilities; indigenous peoples, ethnic, religious or linguistic minorities; internally displaced people and refugees; migrants, particularly undocumented; and persons living with HIV or AIDS.

Terms of Reference (TORs) for an Evaluation
The TORs for an evaluation should contain questions to assess whether the human rights, gender, youth, and environmental dimensions have been adequately considered by the intervention during its design and implementation.